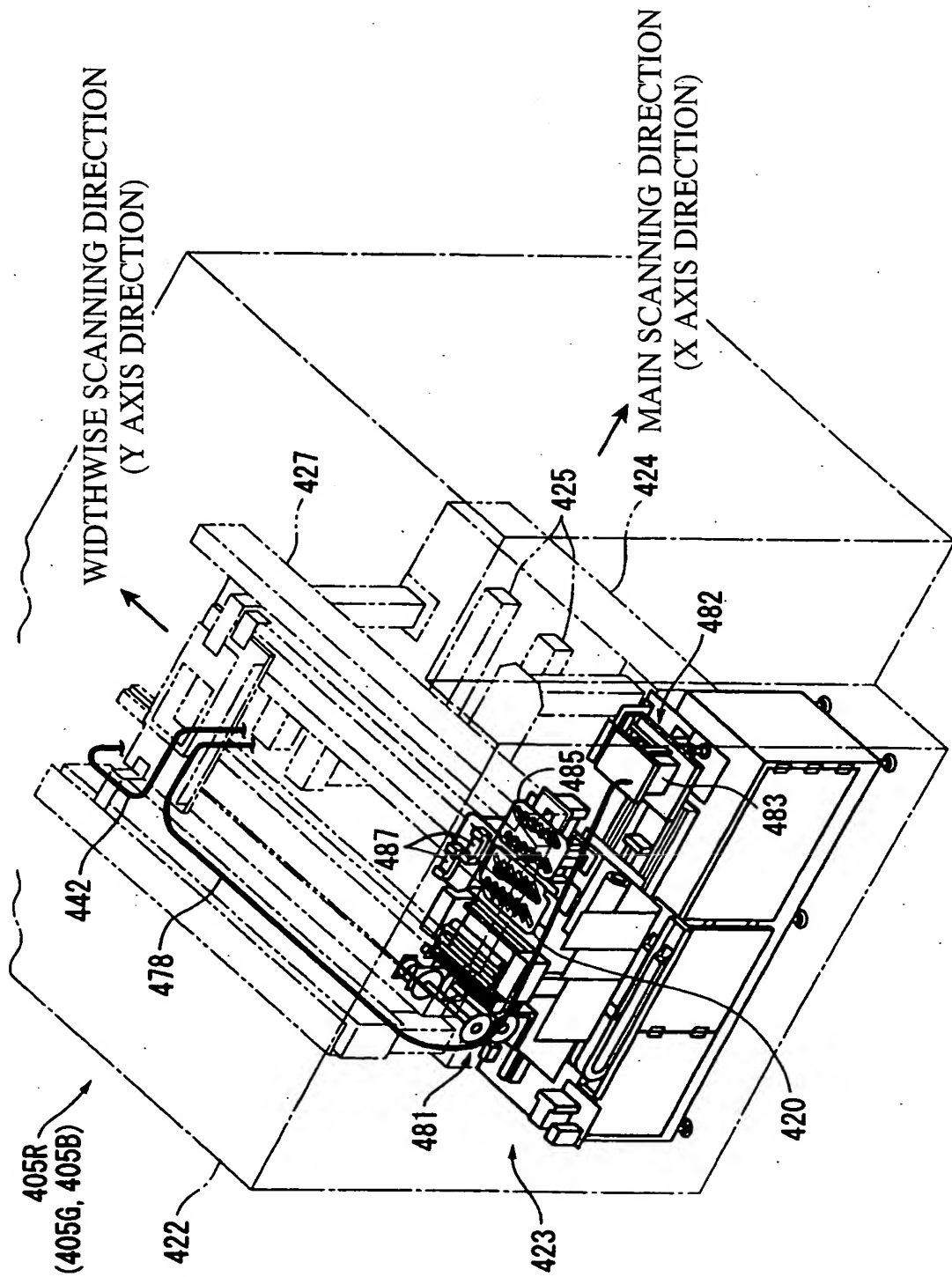


Fig. 1



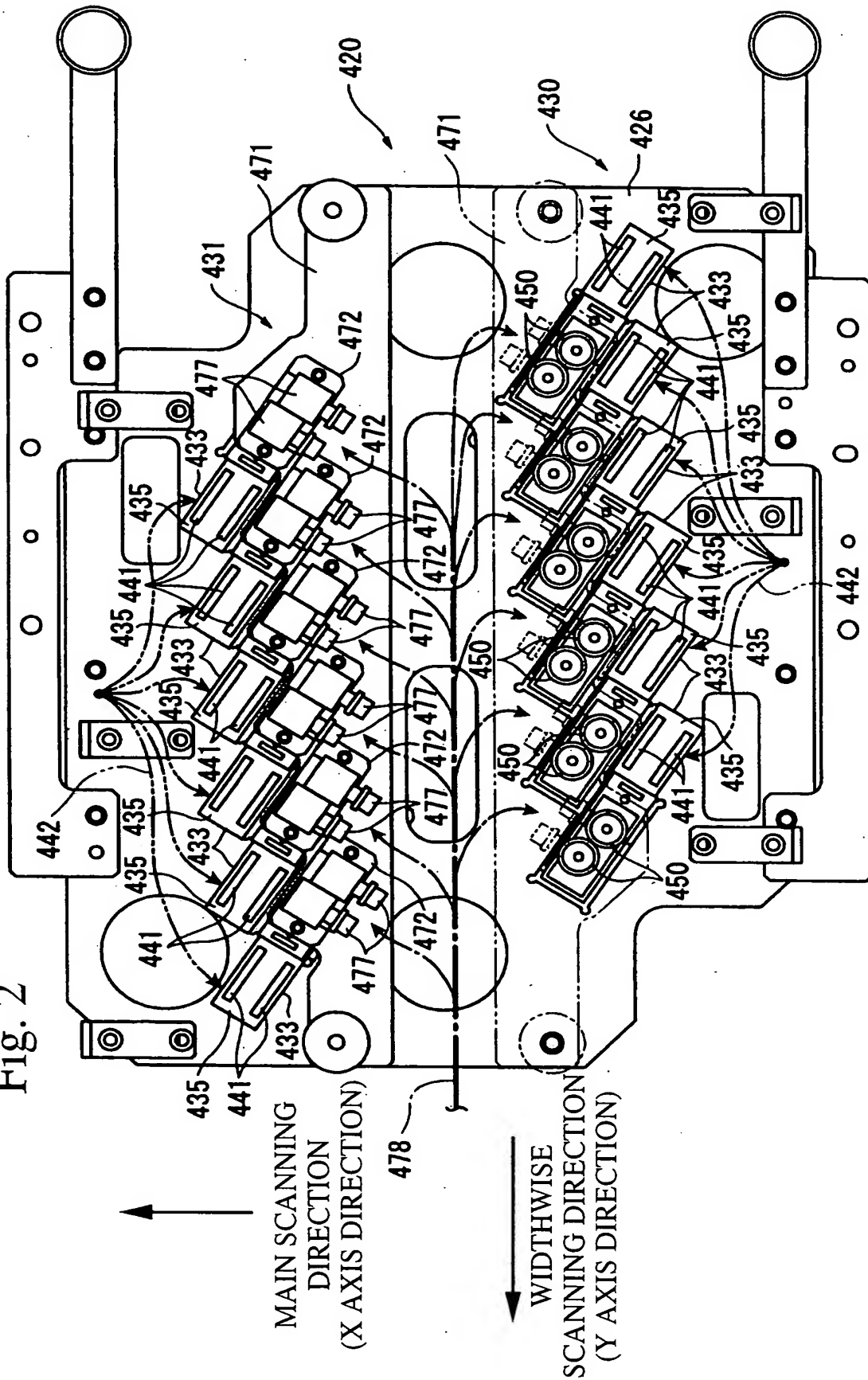


Fig. 3

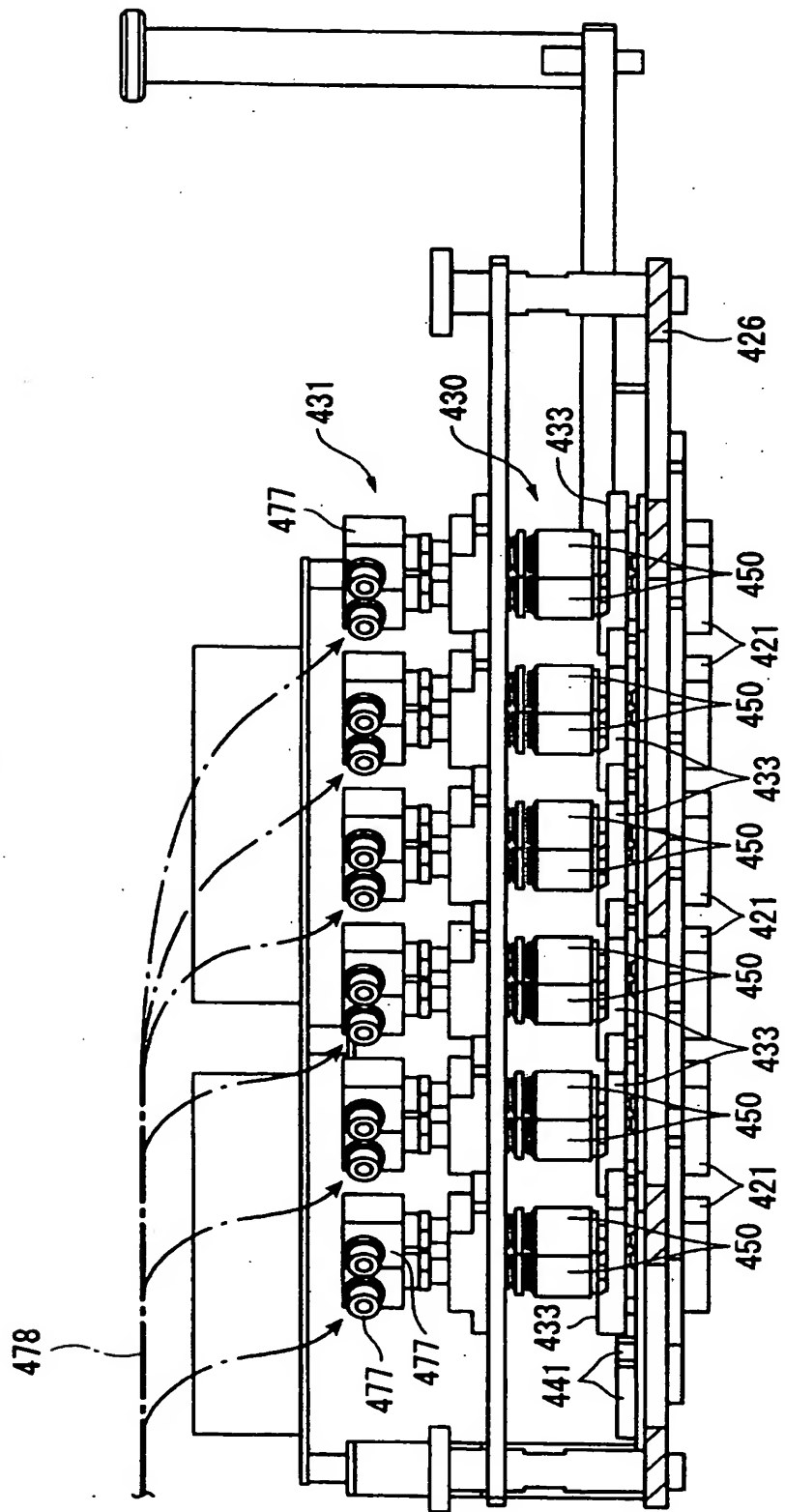
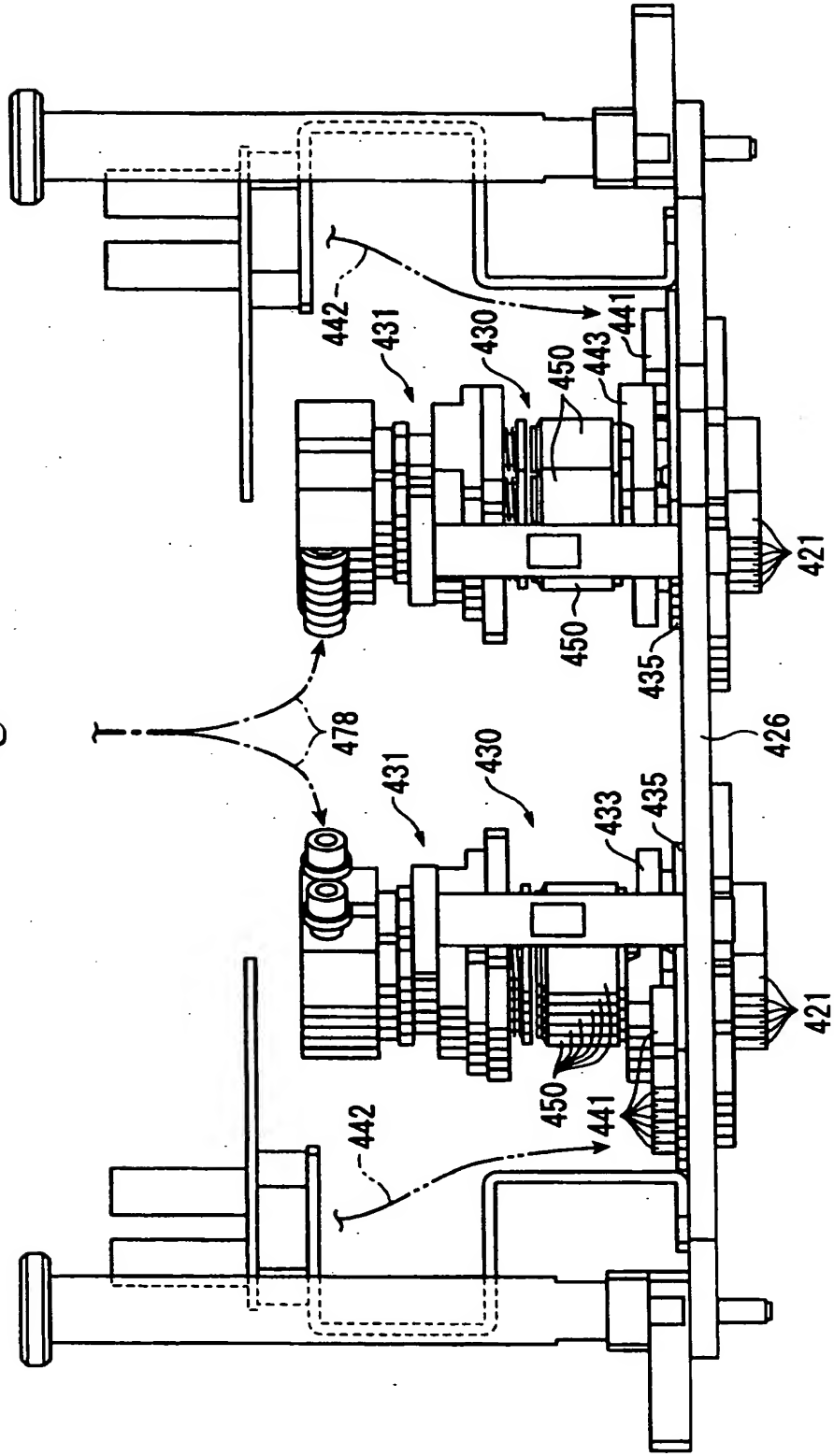


Fig. 4



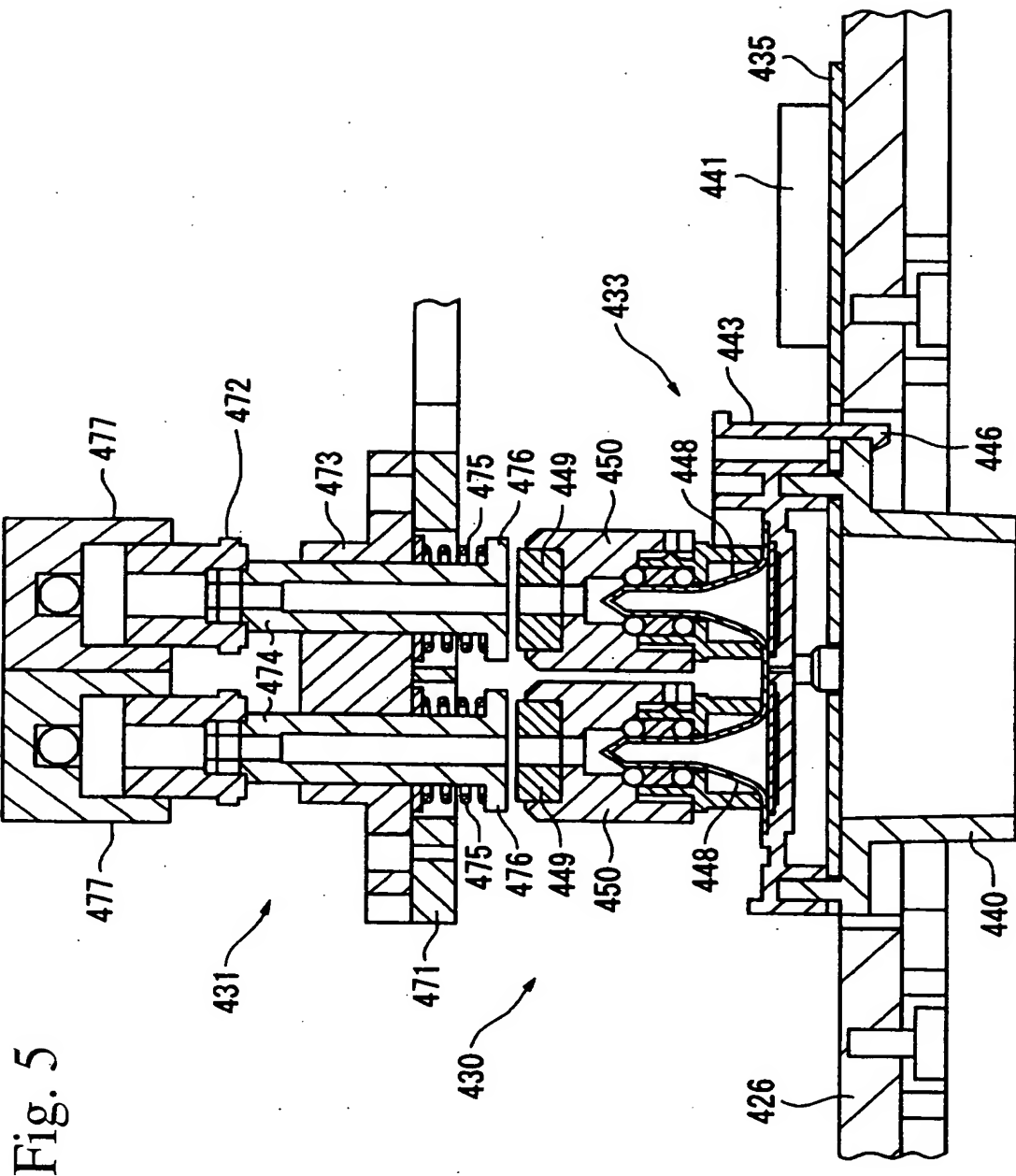


Fig. 6

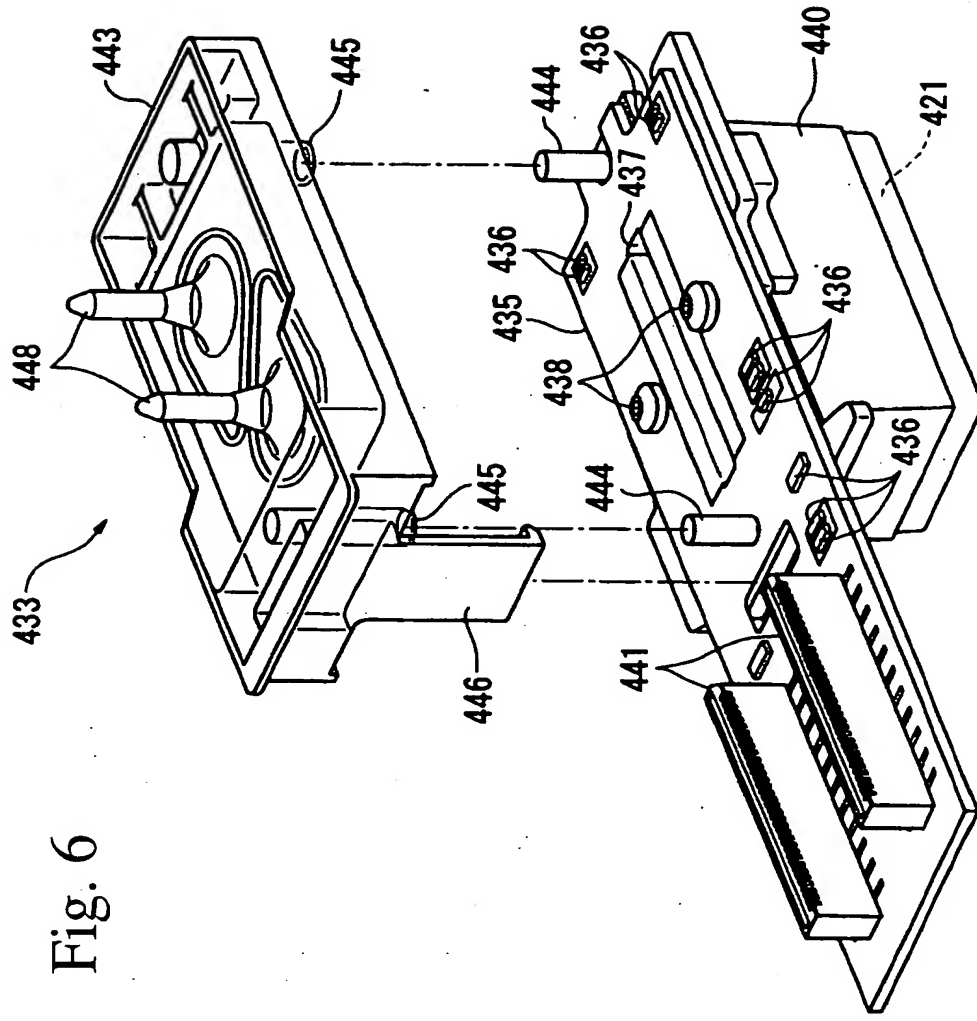


Fig. 7

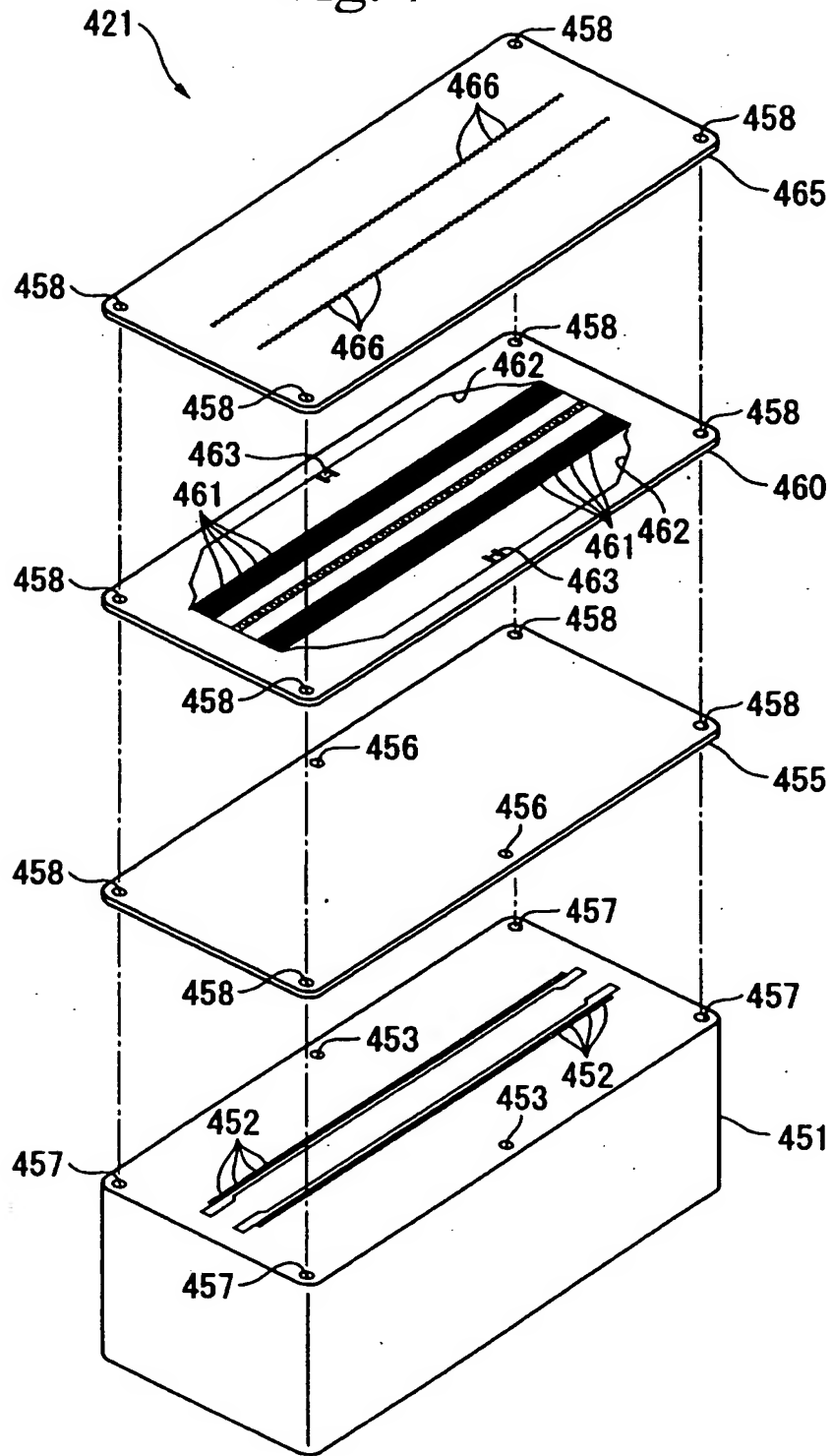


Fig. 8A

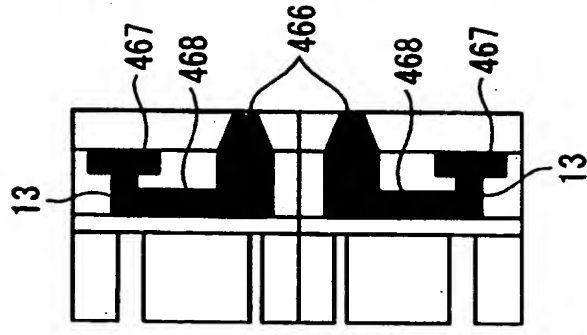


Fig. 8B

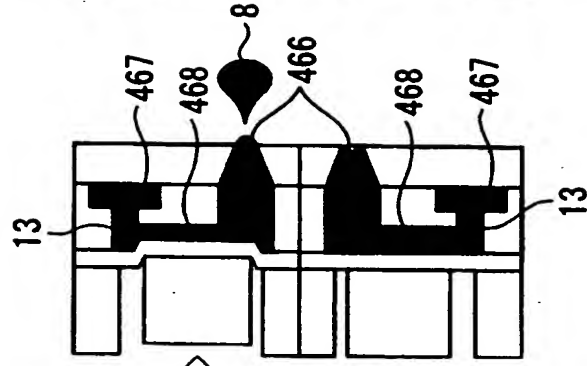


Fig. 8C

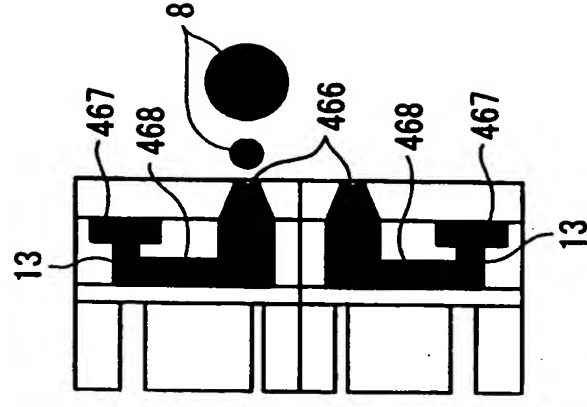




Fig. 9

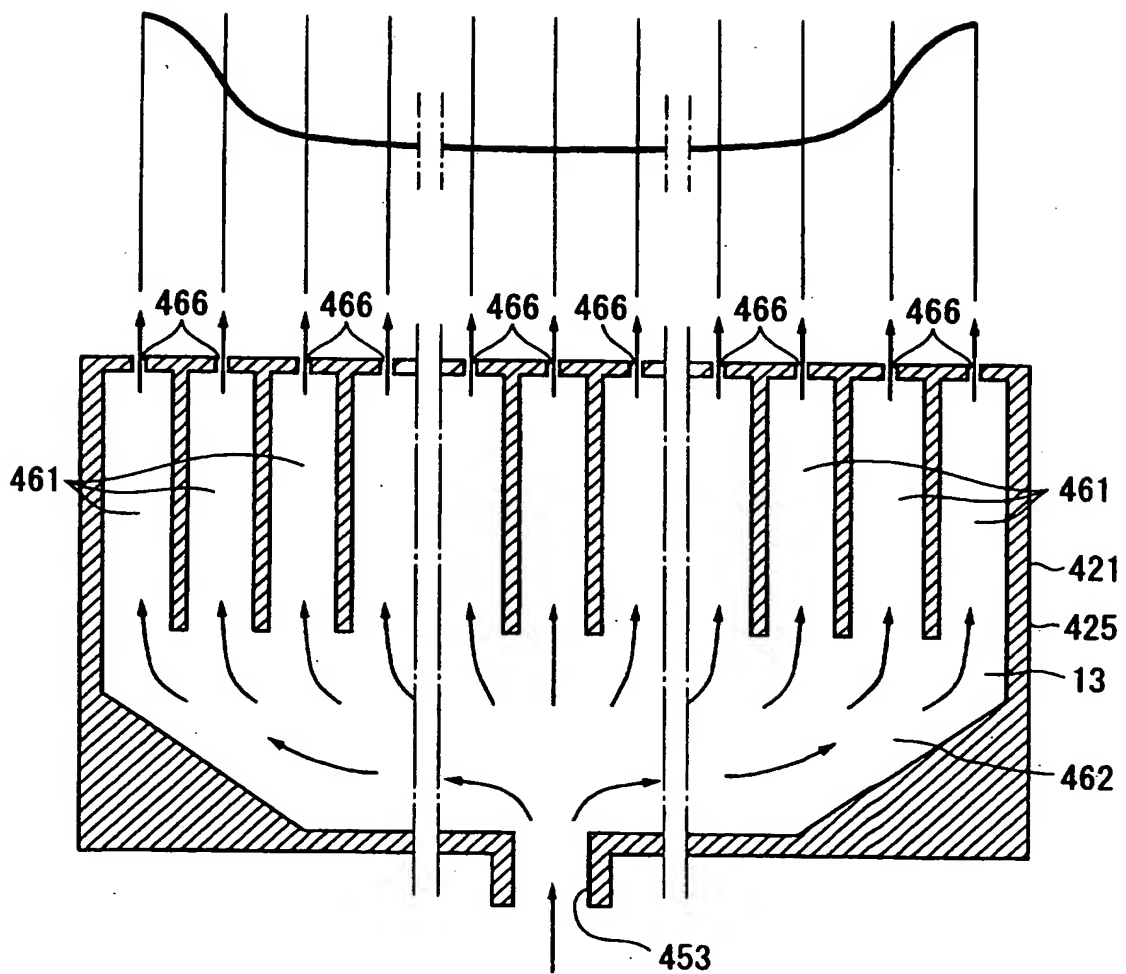


Fig. 10

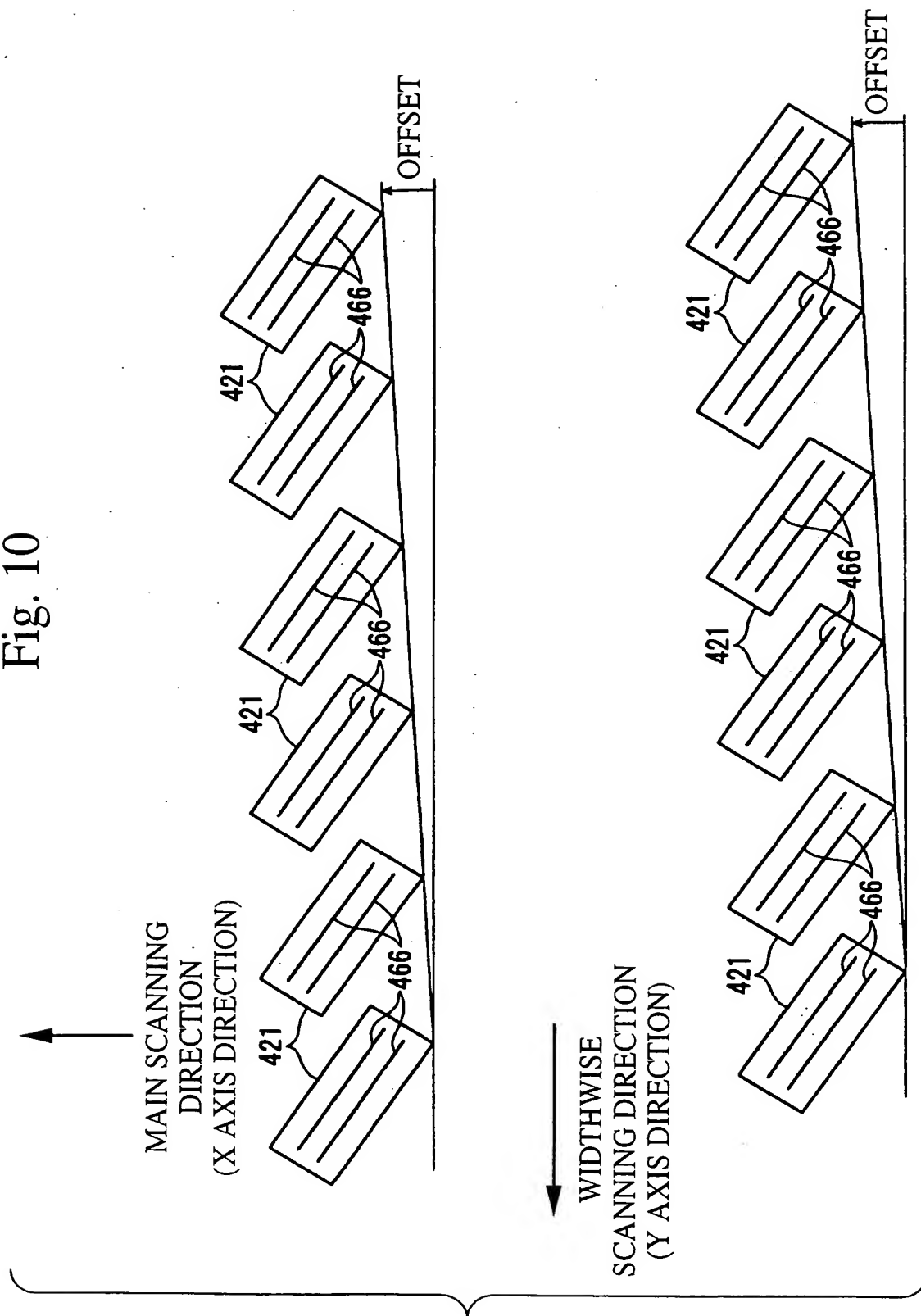


Fig. 11

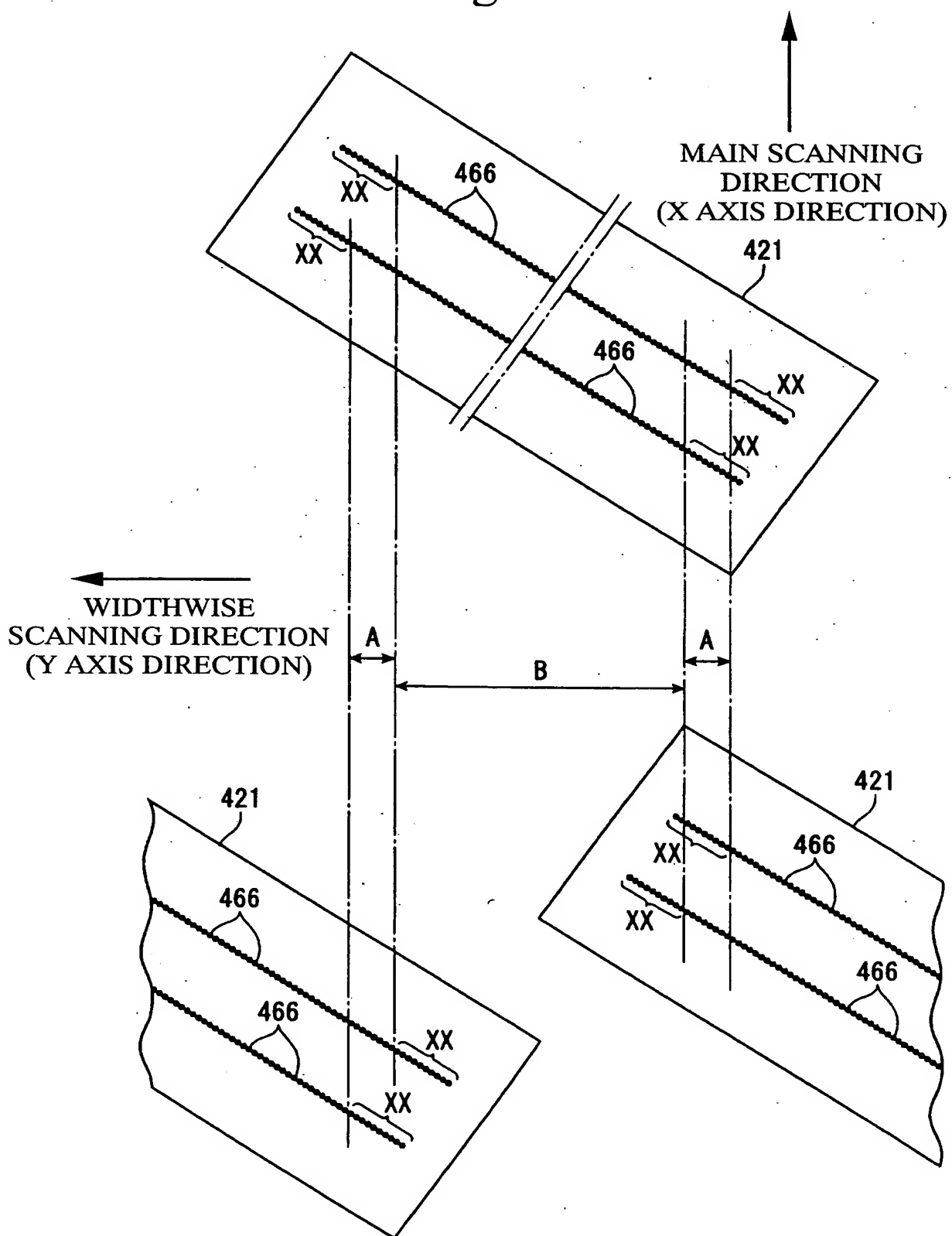


Fig. 12A

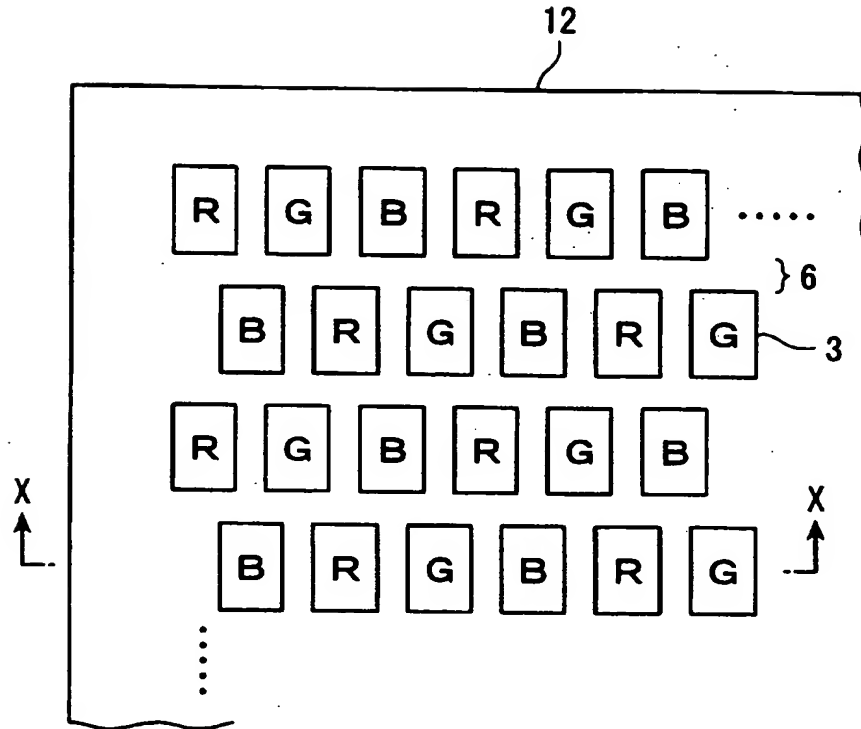


Fig. 12B

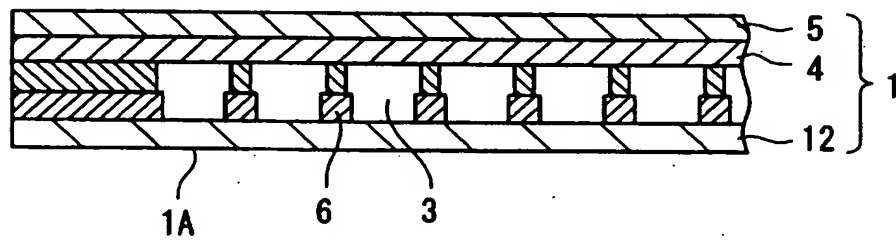
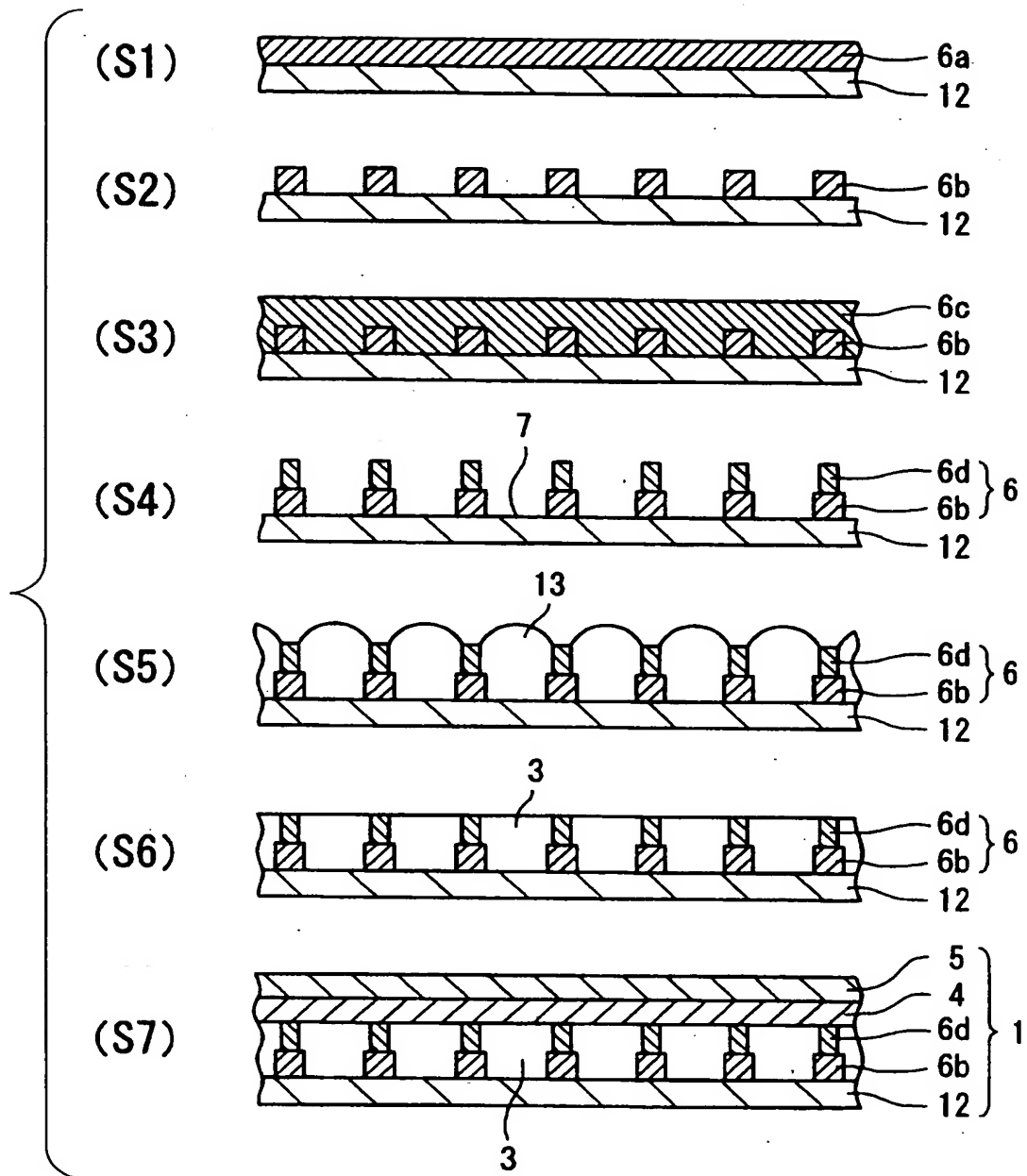


Fig. 13



**- 501**

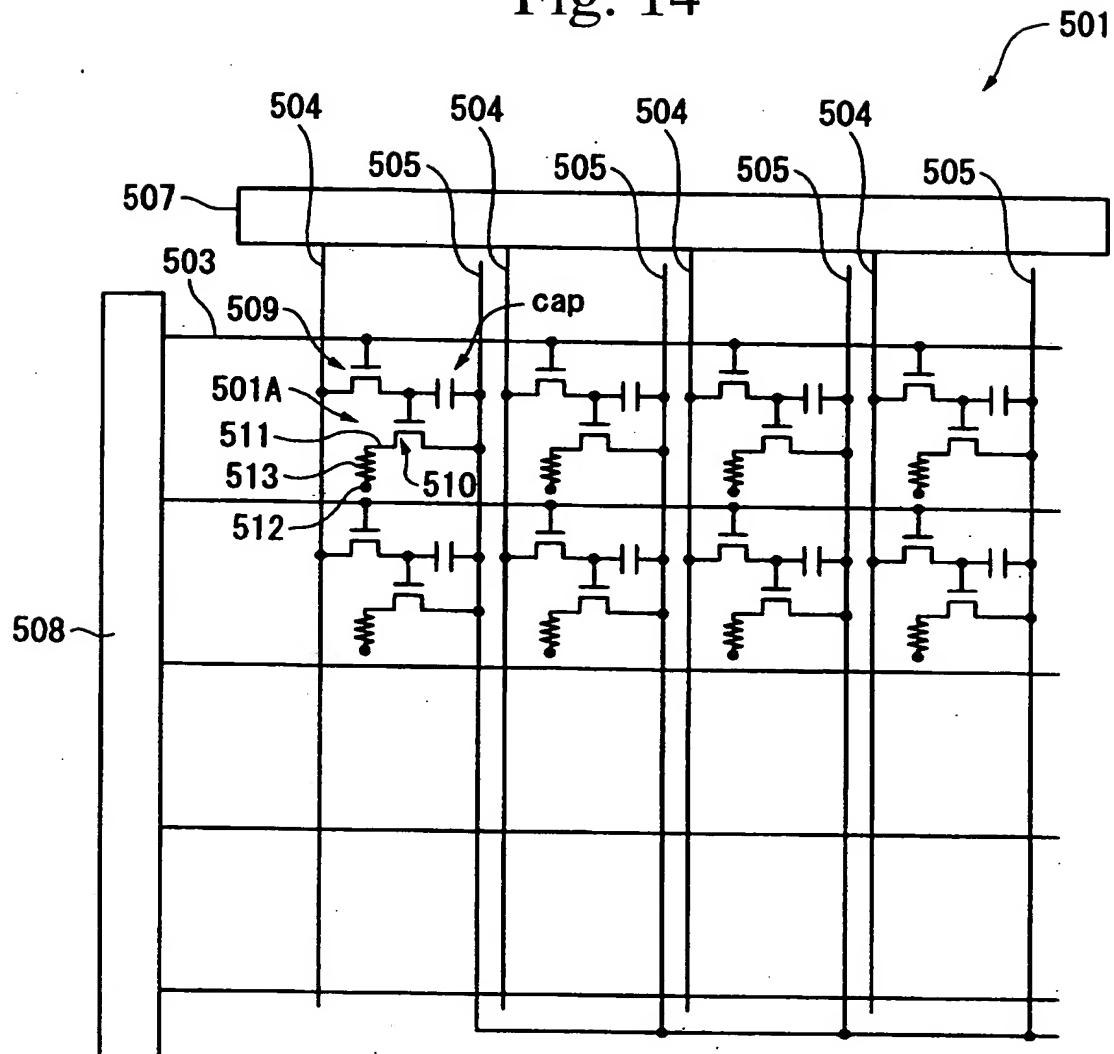


Fig. 15

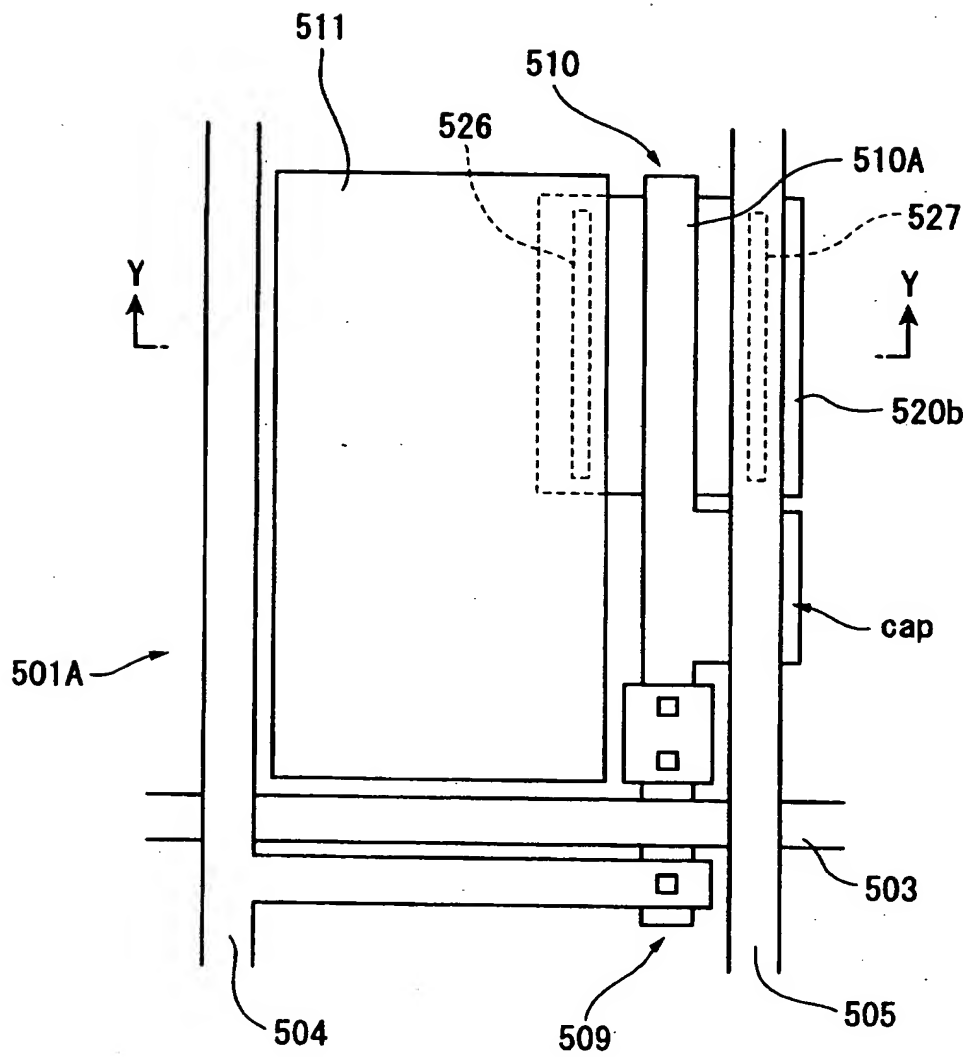


Fig. 16A

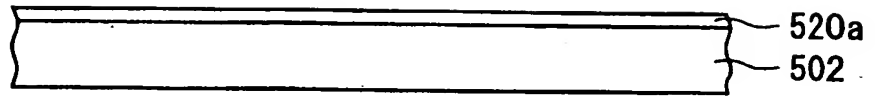


Fig. 16B

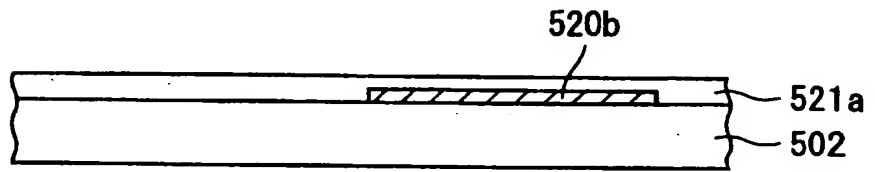


Fig. 16C

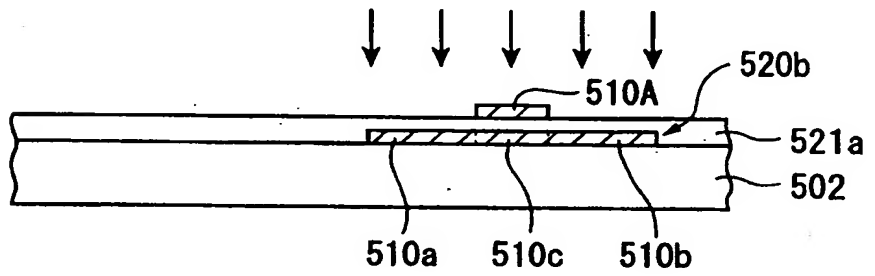


Fig. 16D

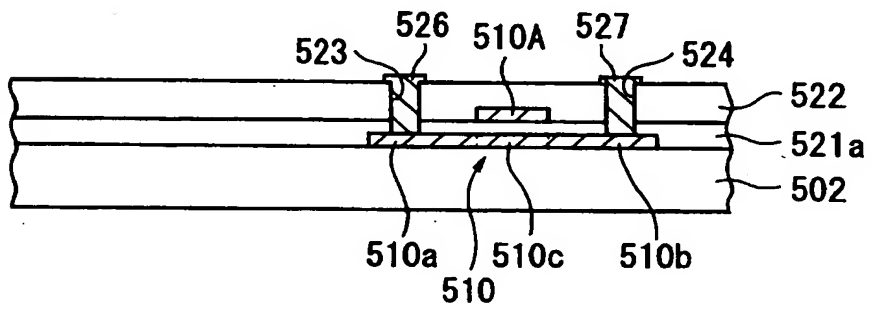


Fig. 16E

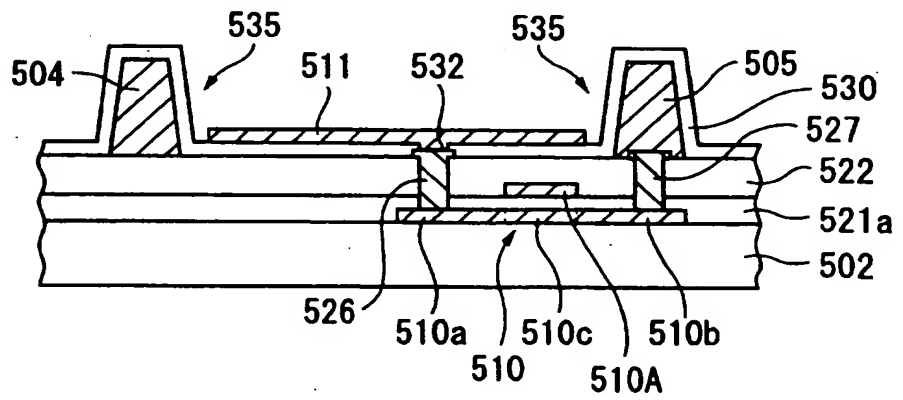




Fig. 17A

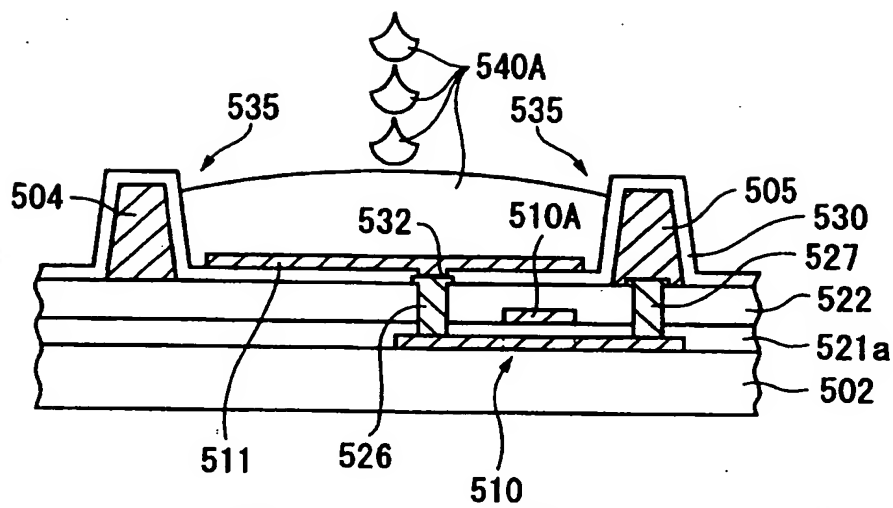


Fig. 17B

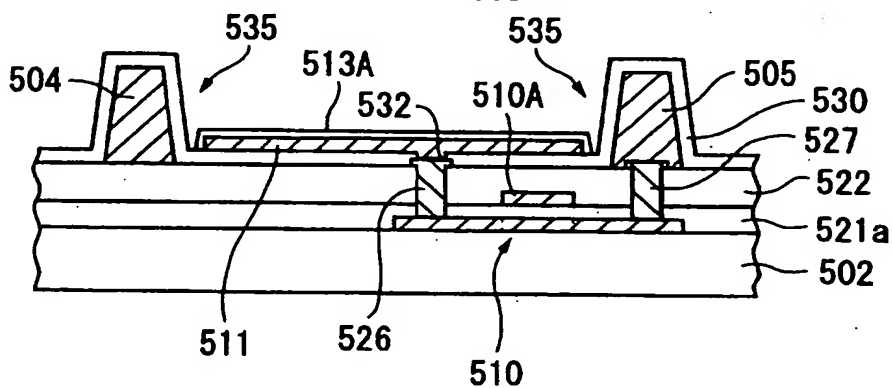
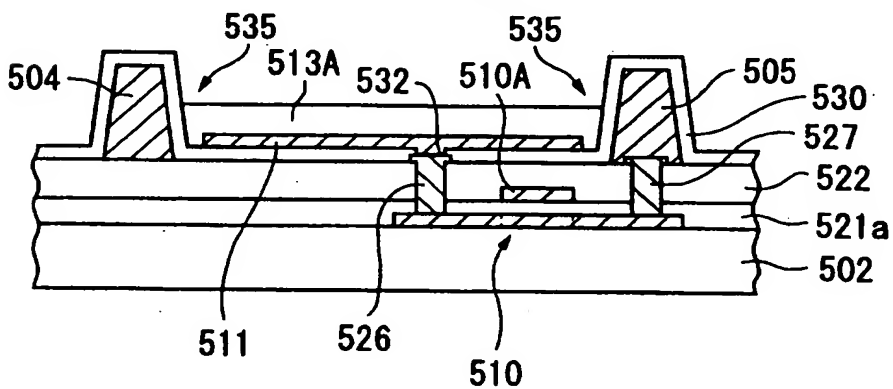


Fig. 17C



[illegible]

This cross-sectional diagram illustrates a semiconductor device. It features a substrate with several distinct layers: 502 at the base, followed by 521a, 522, 527, and 530. A central structure 510 is positioned on the substrate, containing a component 510A. This central structure is flanked by two side structures, 513A on the right and 513B on the left. Each side structure includes a top layer 504 and a base layer 505. Various other components are labeled with reference numerals: 511, 526, and 513 are located within the central structure 510, while 532 is positioned between the side structures 513A and 513B.

Fig .19

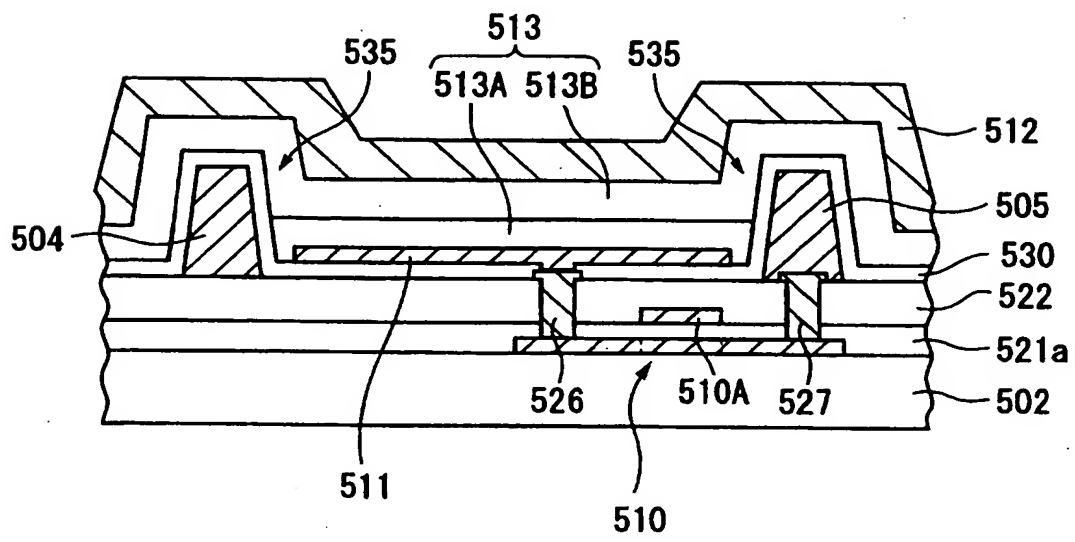


Fig .20A

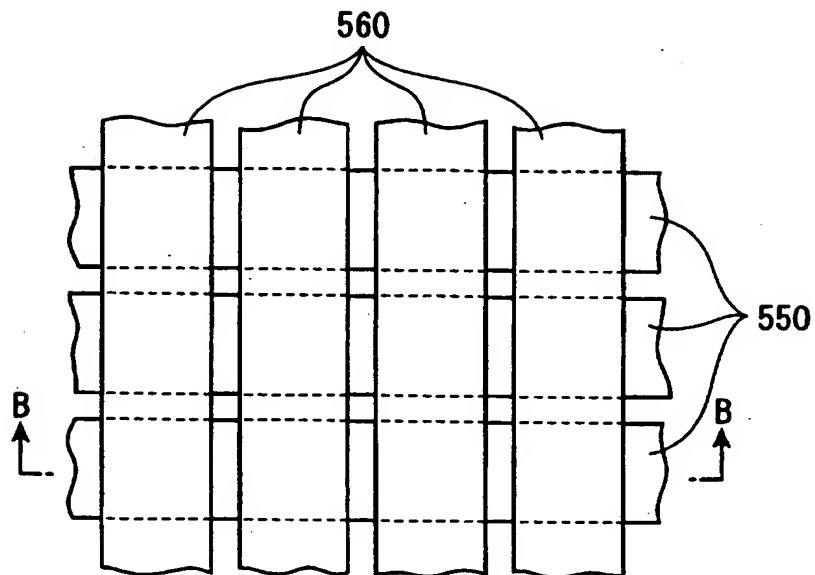


Fig .20B

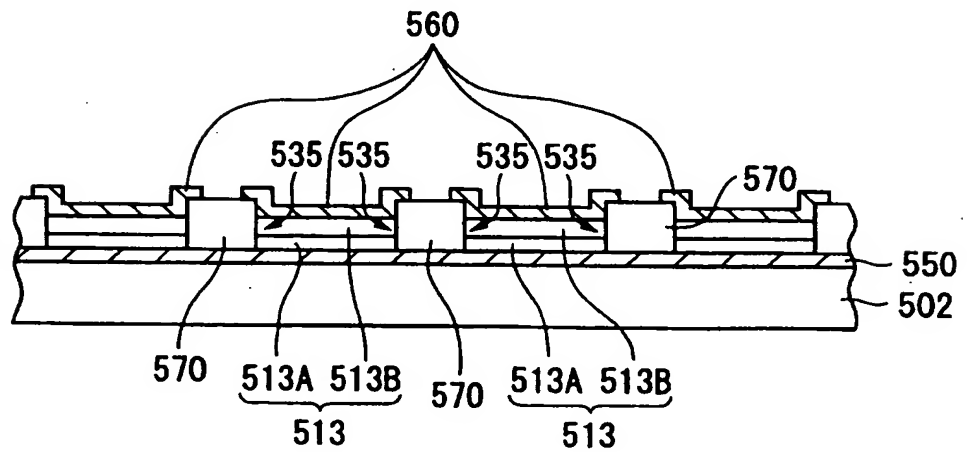


Fig .21

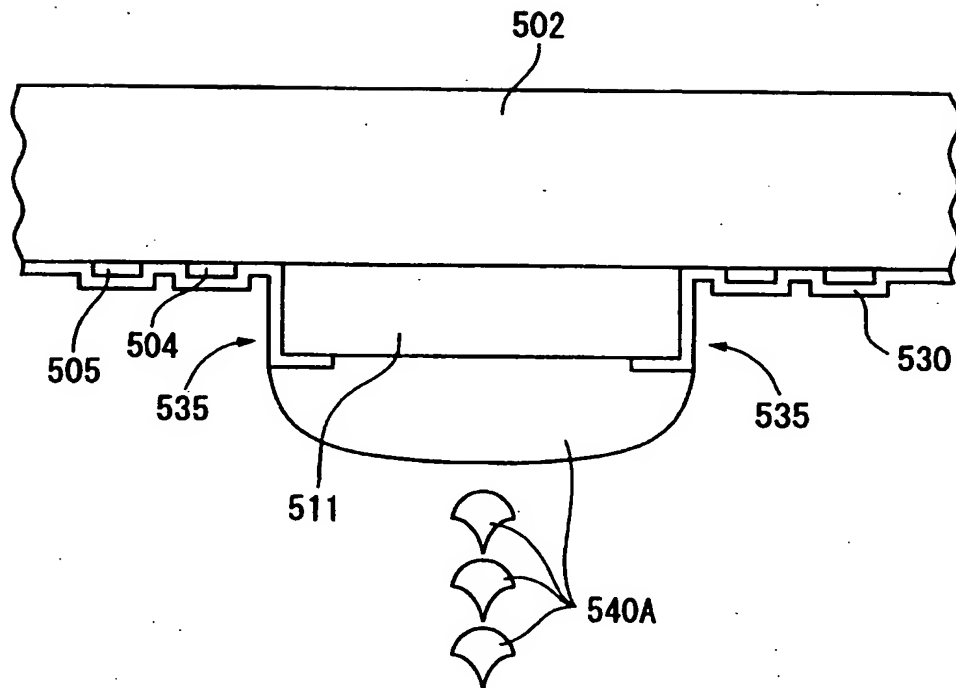


Fig .22

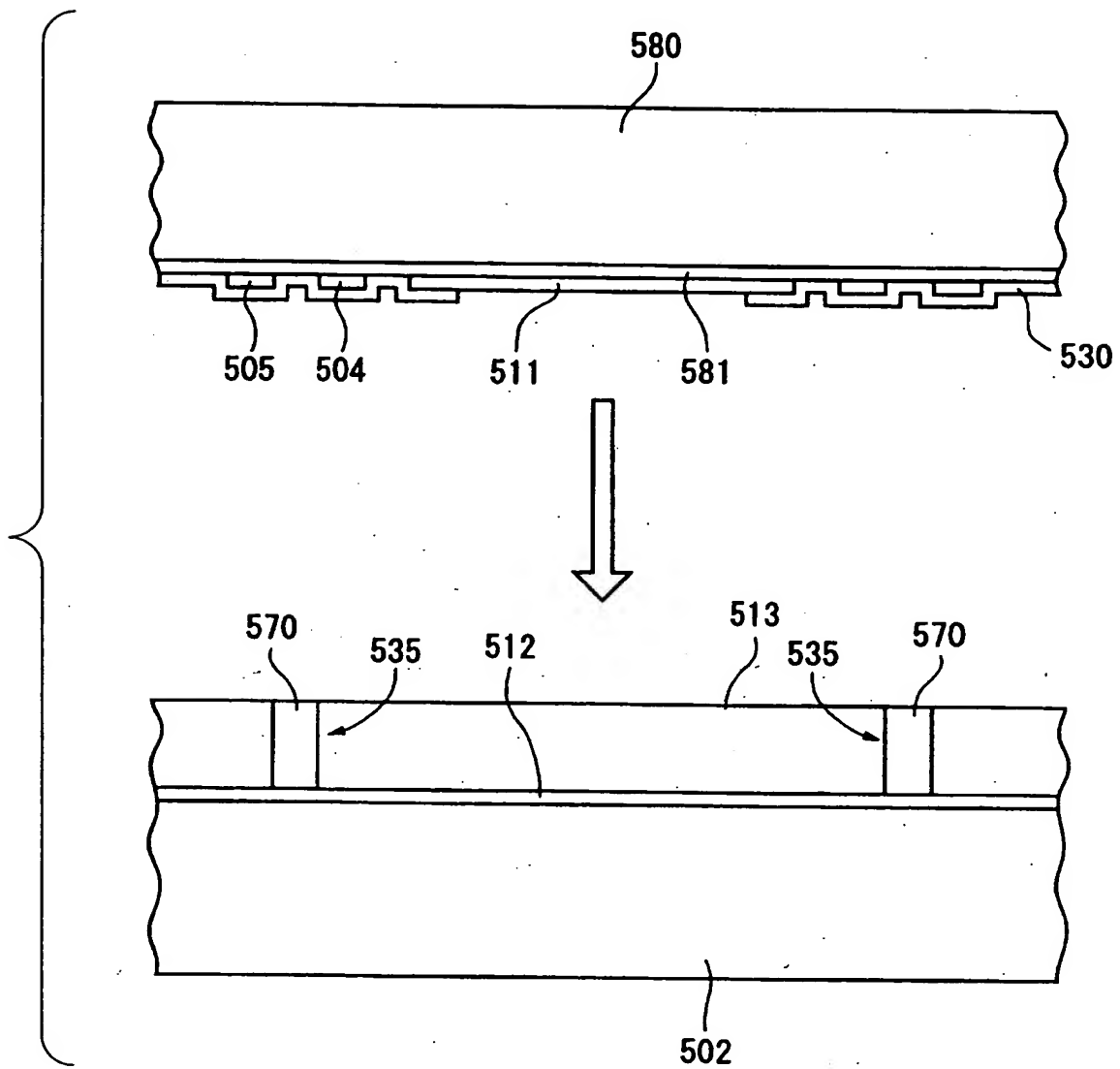


Fig .23

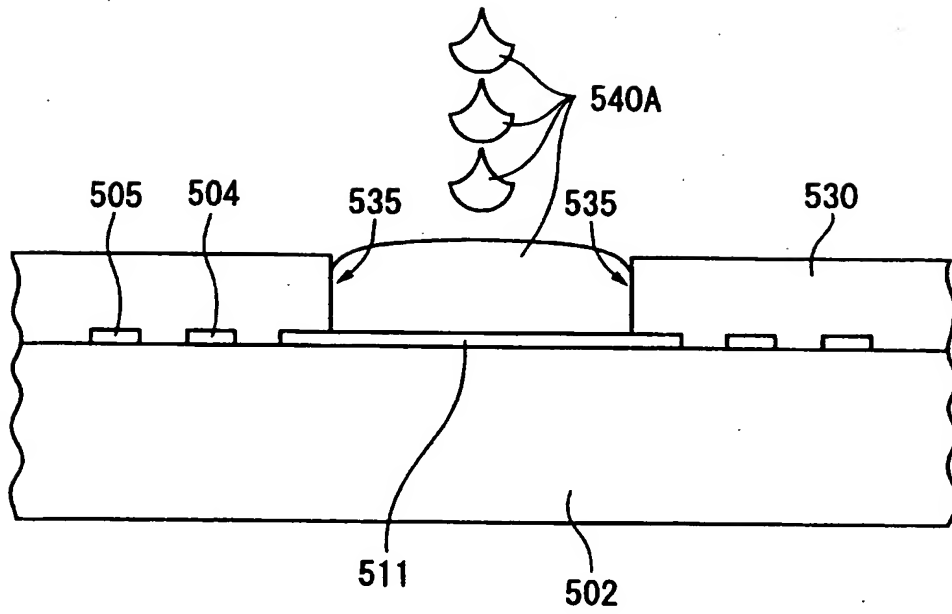


Fig .24

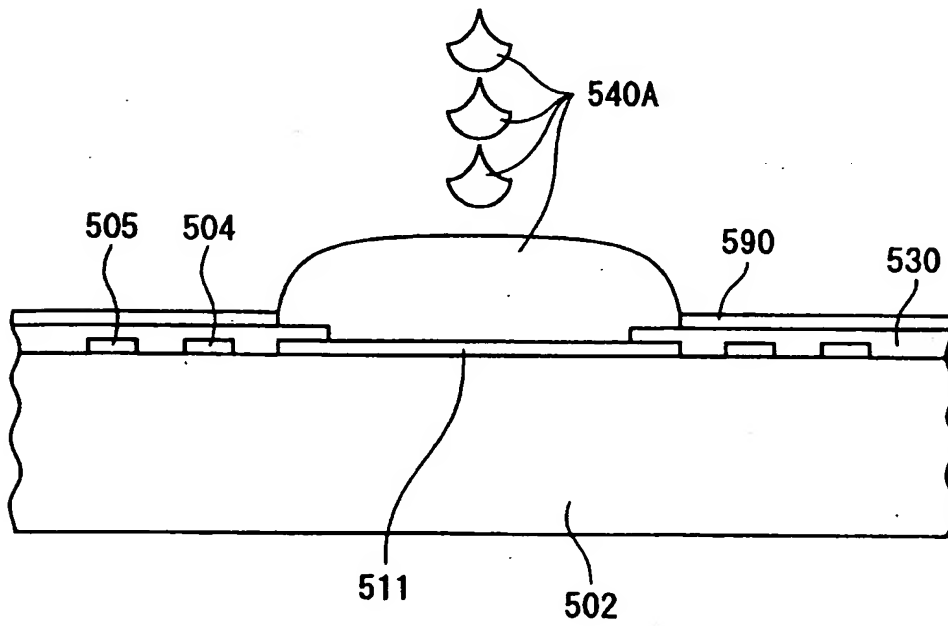


Fig .25

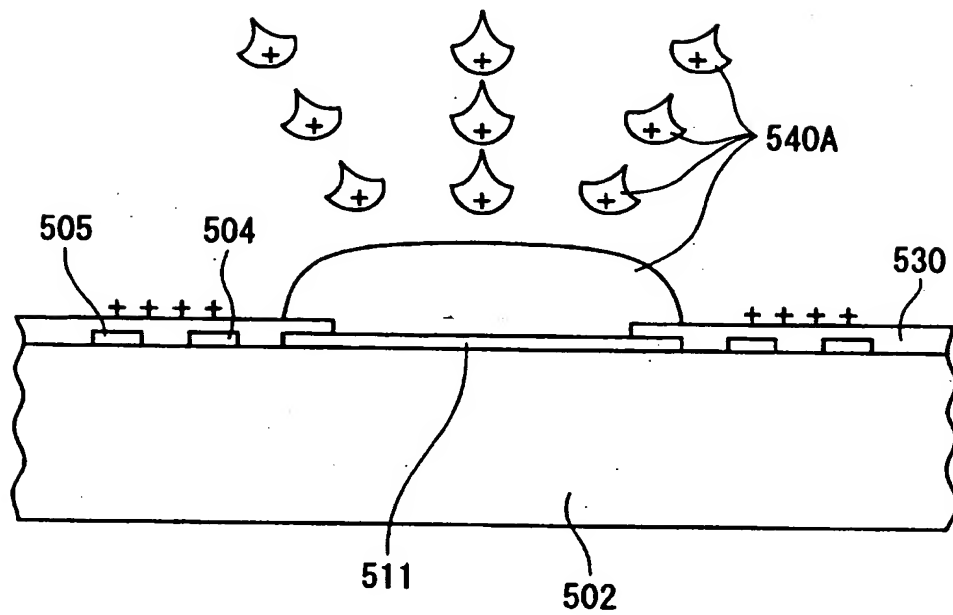


Fig .26

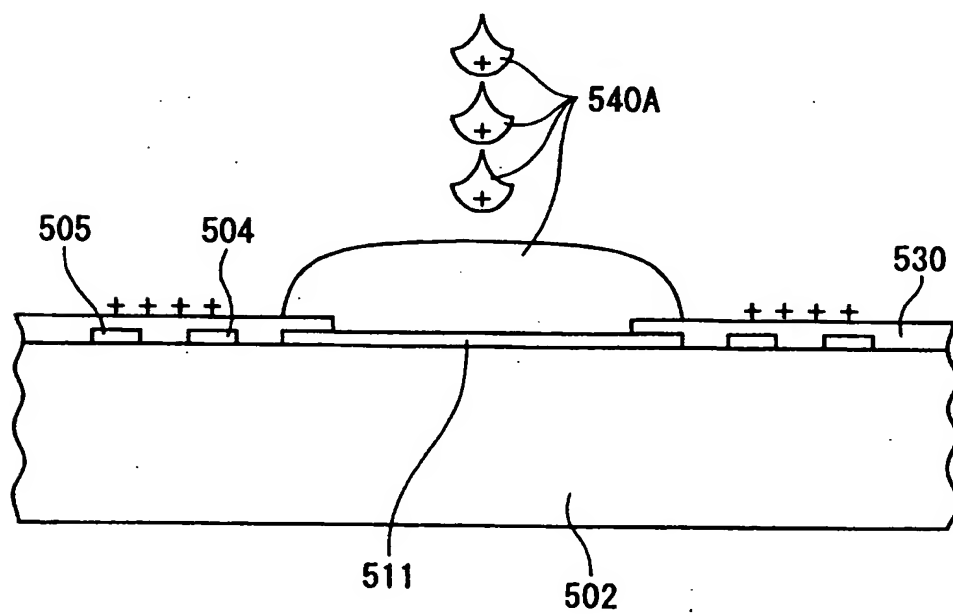




Fig. 27

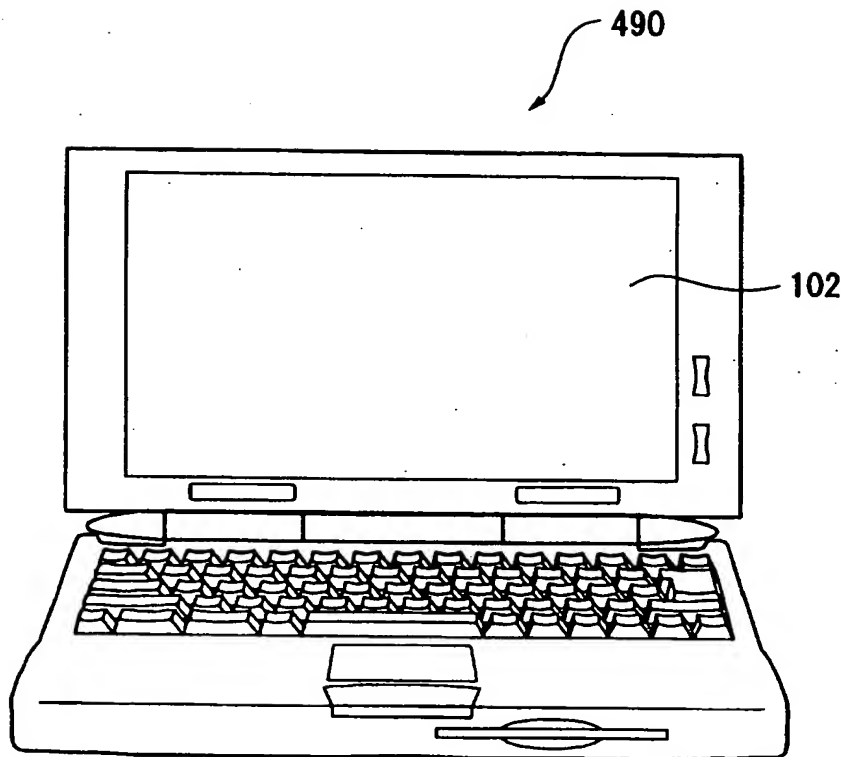
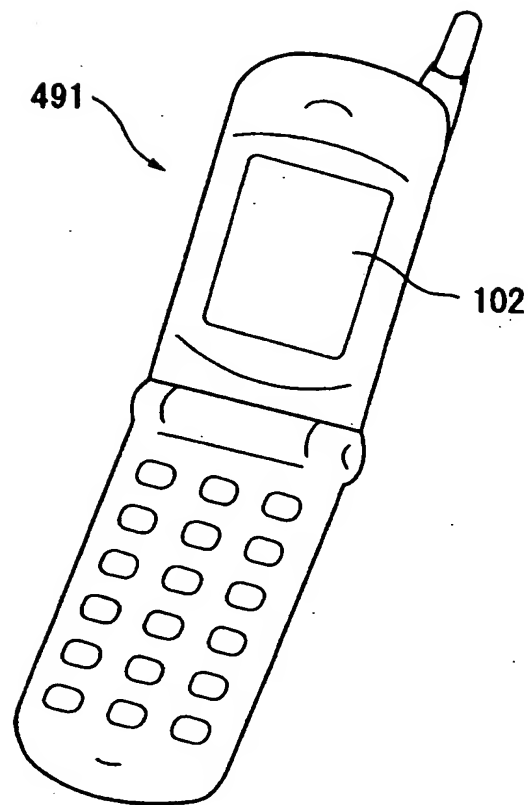
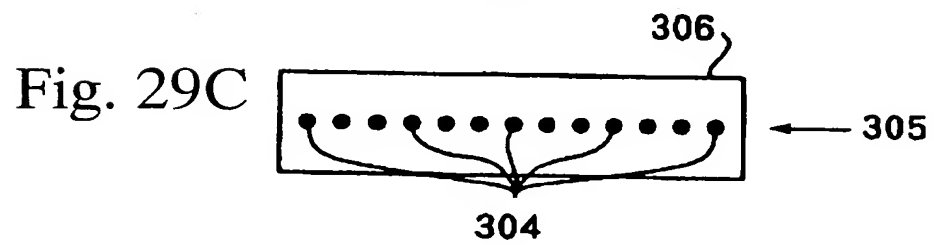
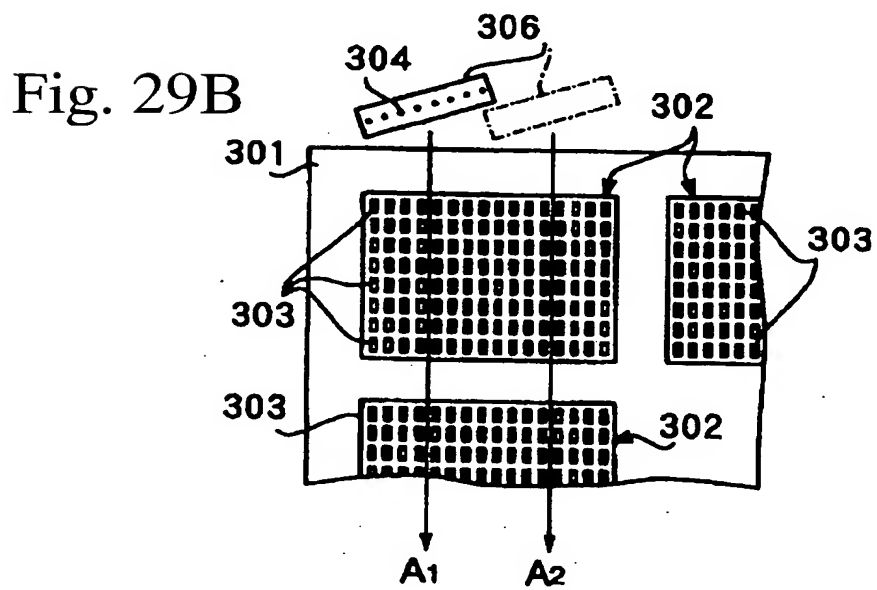
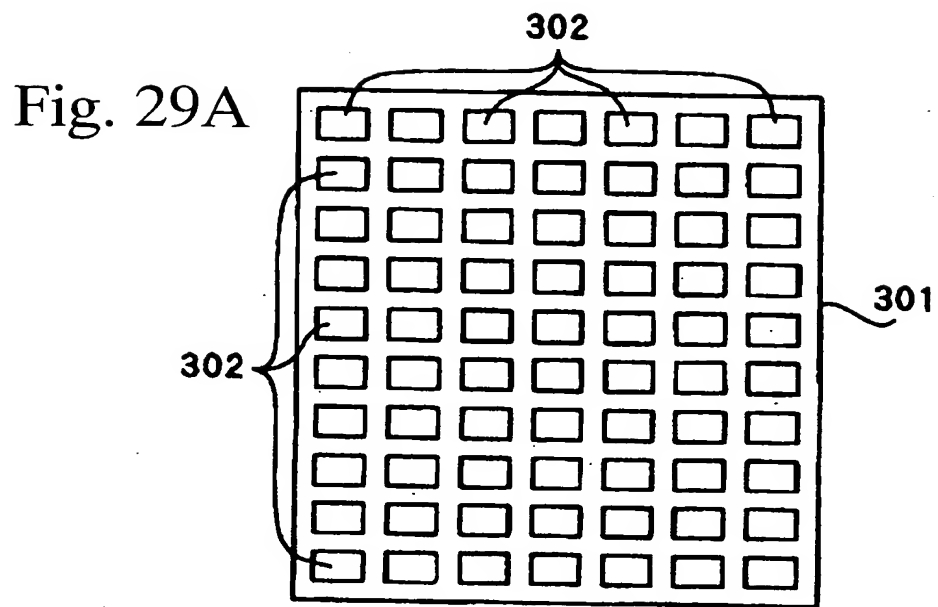


Fig. 28





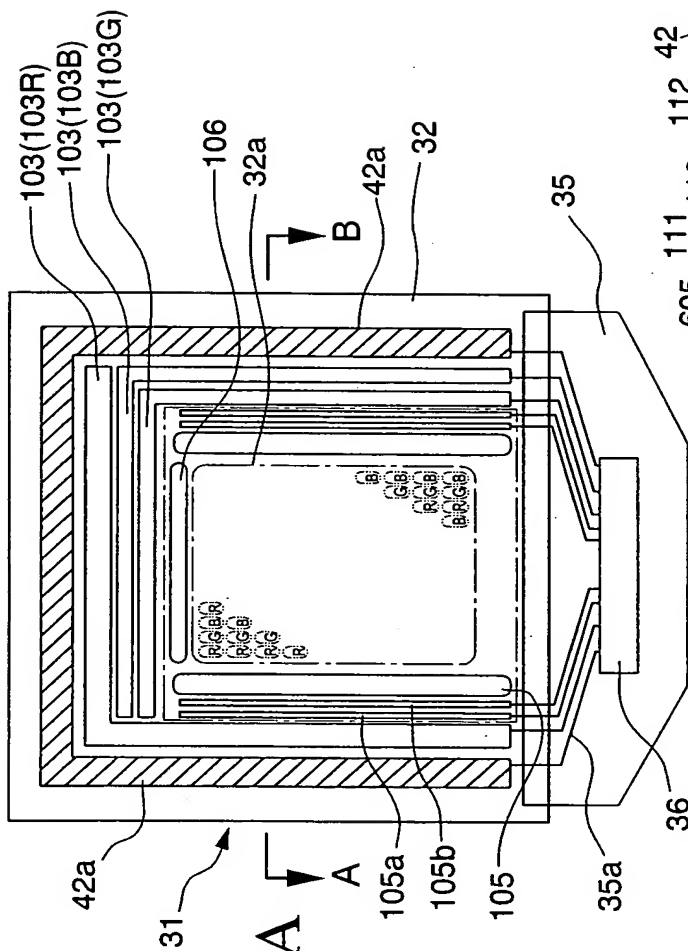


Fig. 30A

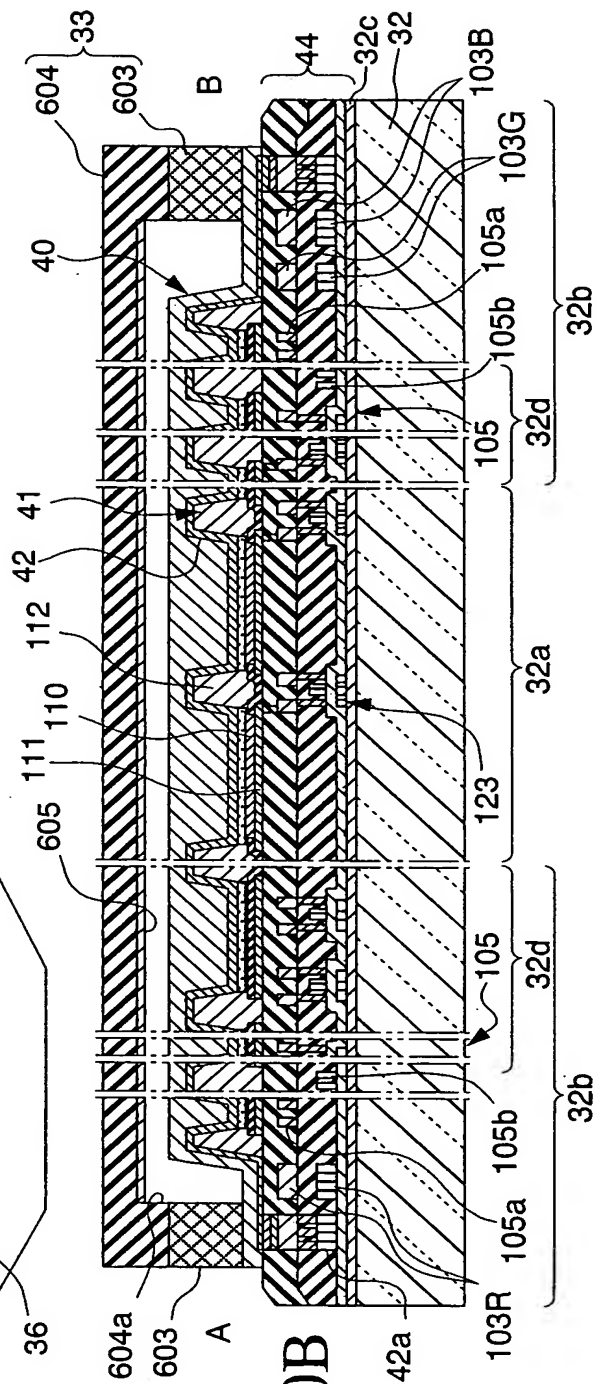


Fig. 30B



Fig. 32

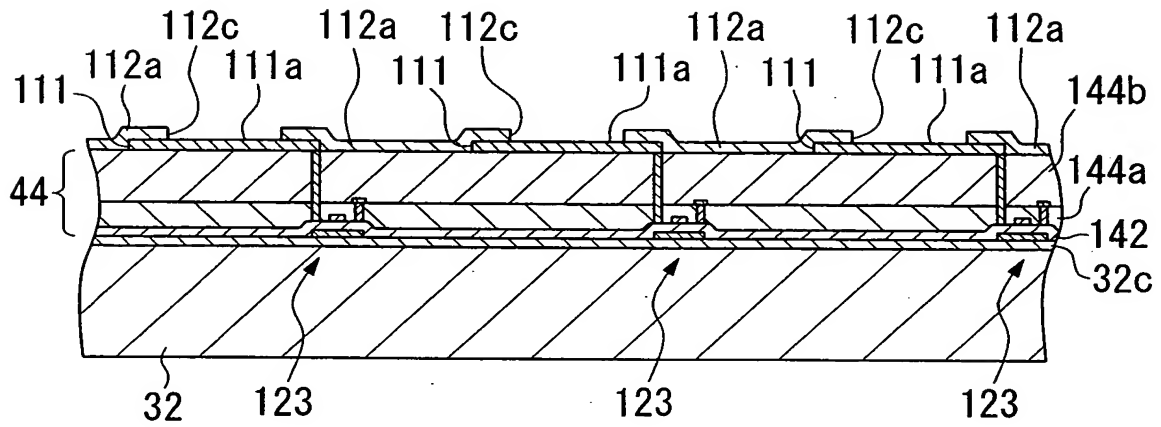


Fig. 33

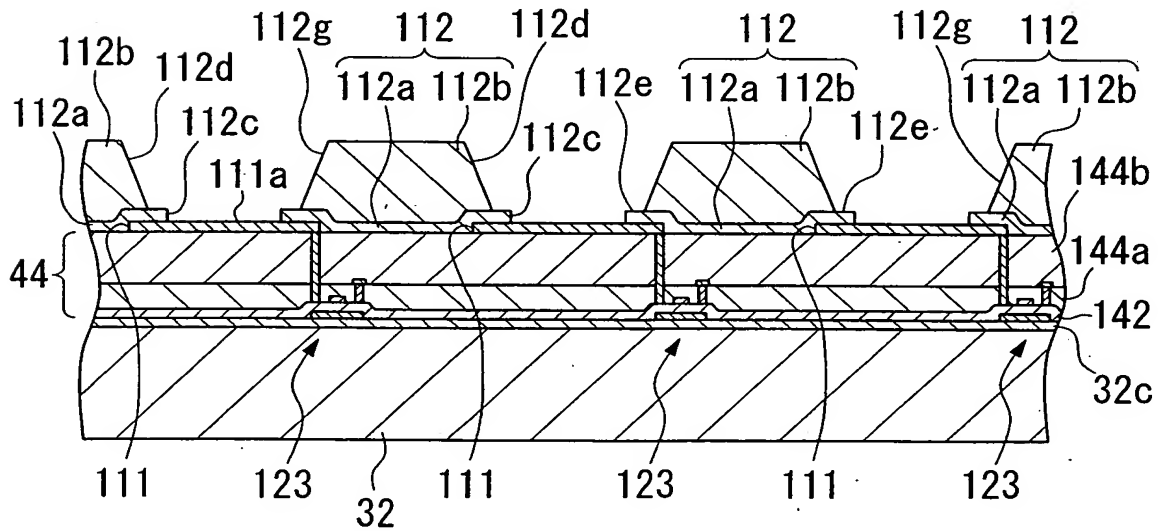


Fig. 34

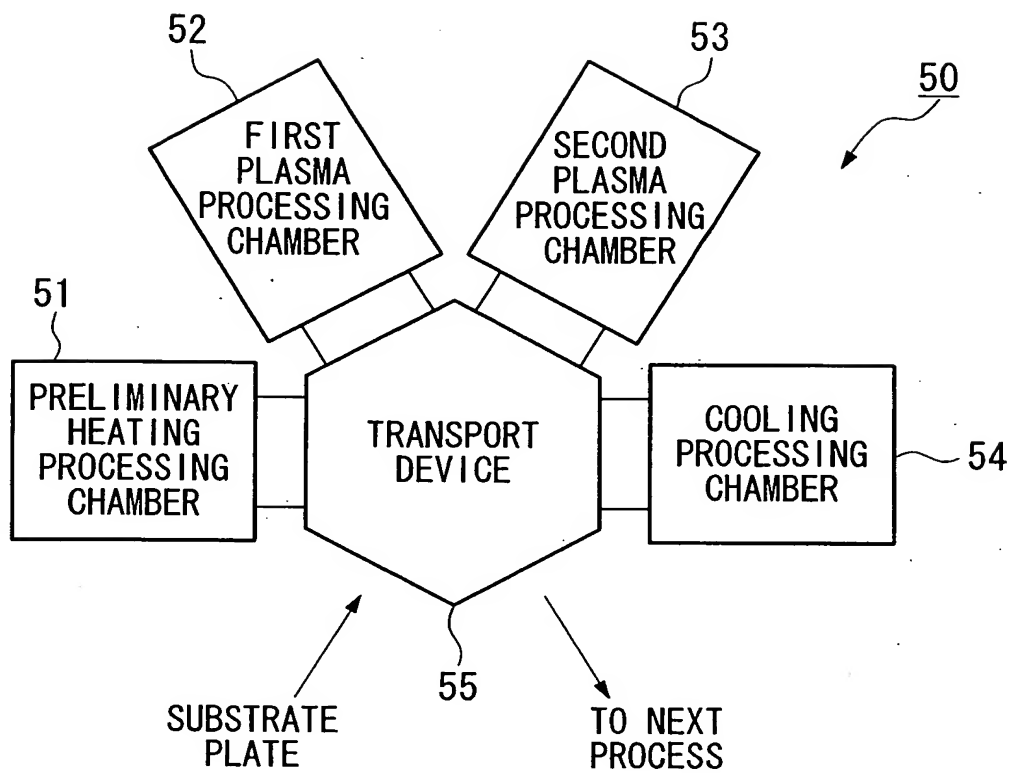
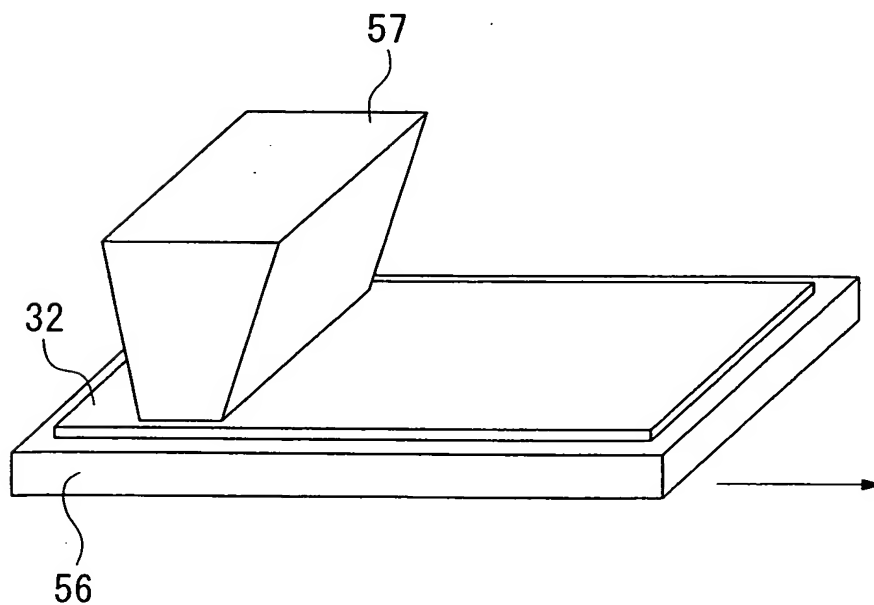


Fig. 35



[illegible]

A detailed cross-sectional diagram of a semiconductor device. The structure consists of several horizontal layers. At the bottom is a substrate labeled 32c. Above it are three main horizontal regions: 111, 123, and 111 again. Within the 123 regions, there are smaller features labeled 123 and 123. On top of the 111 layers, there are complex structures labeled 112. These structures include sub-layers 112a, 112b, 112d, 112e, and 112f. A bracket labeled 112 groups the upper parts of these structures. Below the 112 structures, there are additional layers labeled 111a and 111a. To the right, there are labels 144b, 144a, and 142 pointing to different vertical sections or interfaces. A bracket labeled 44 is shown on the left side, encompassing the central part of the device.



Fig. 38

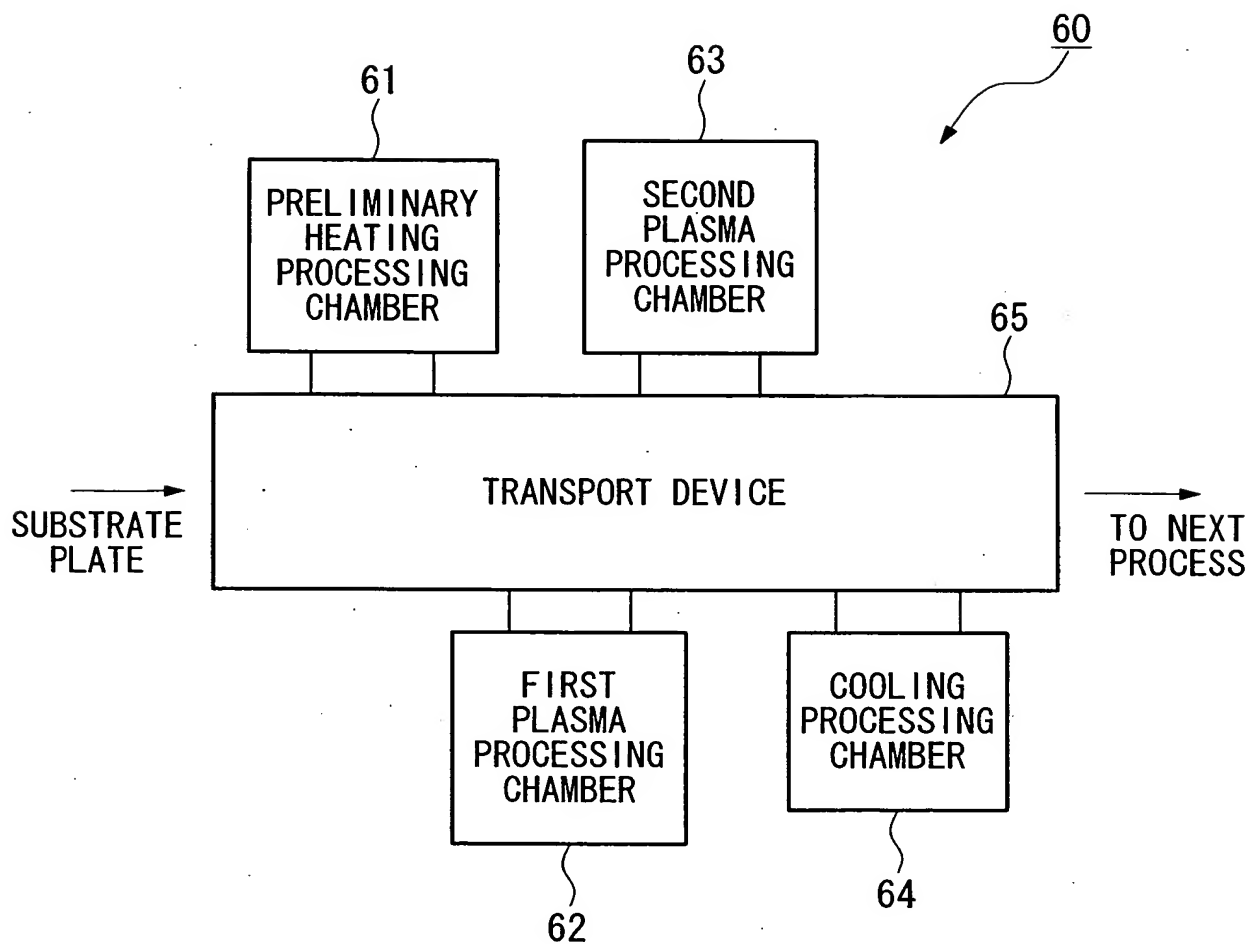


Fig. 39

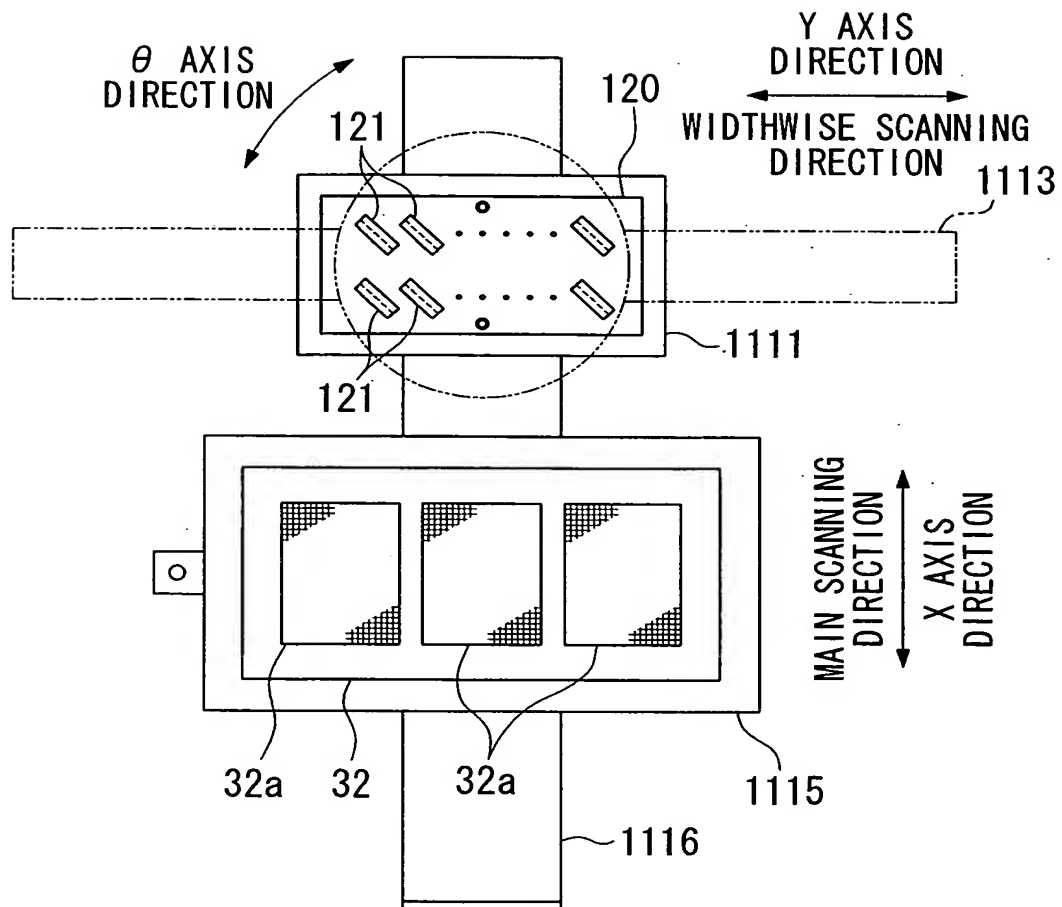


Fig. 40

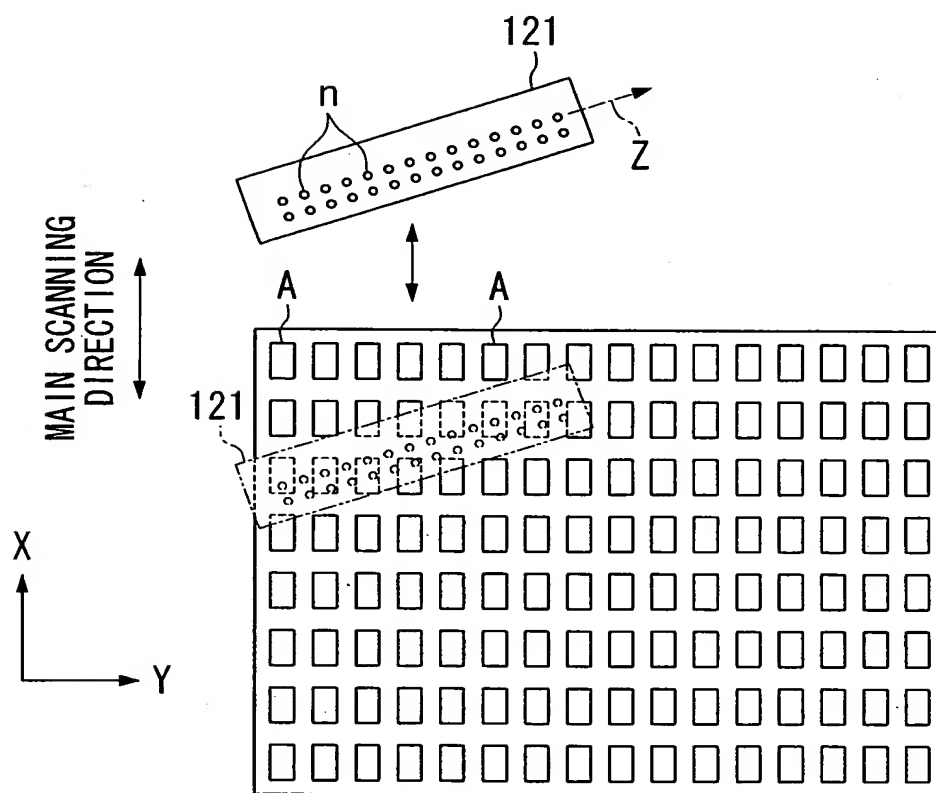


Fig. 41A

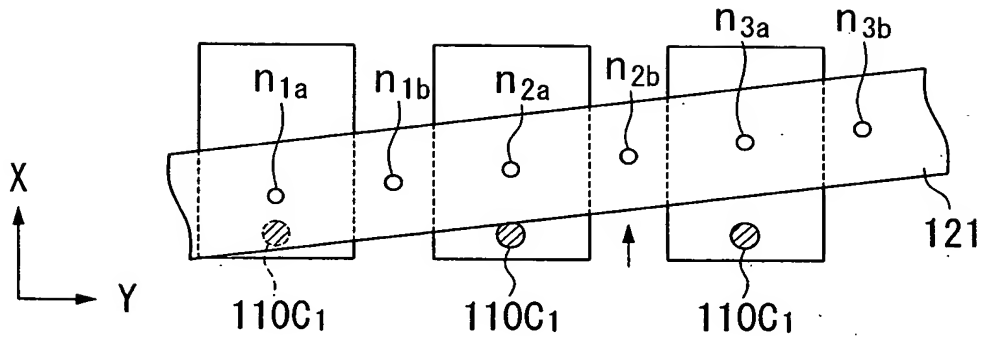


Fig. 41B

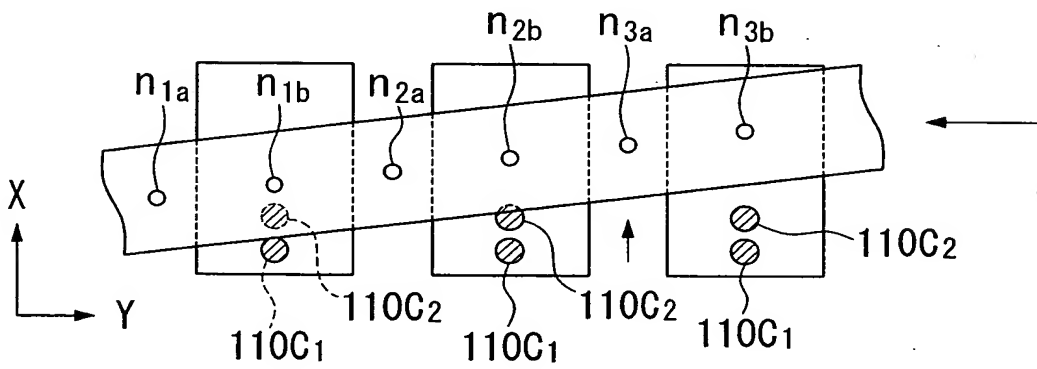


Fig. 41C

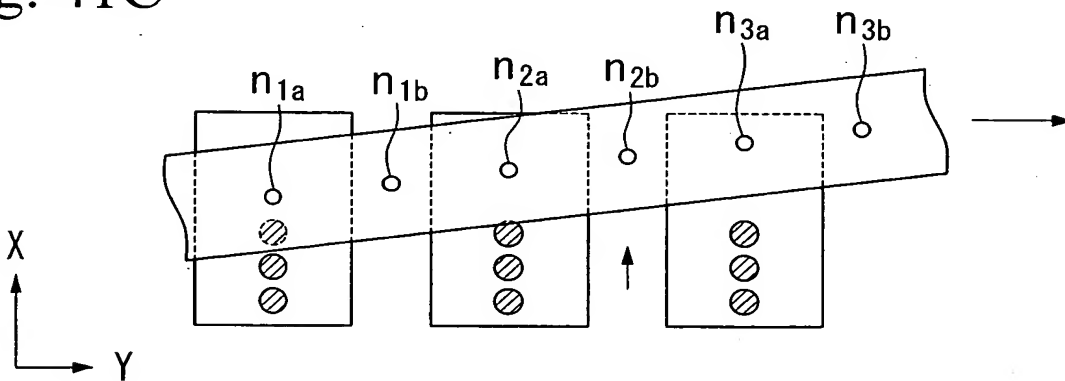


Fig. 42A

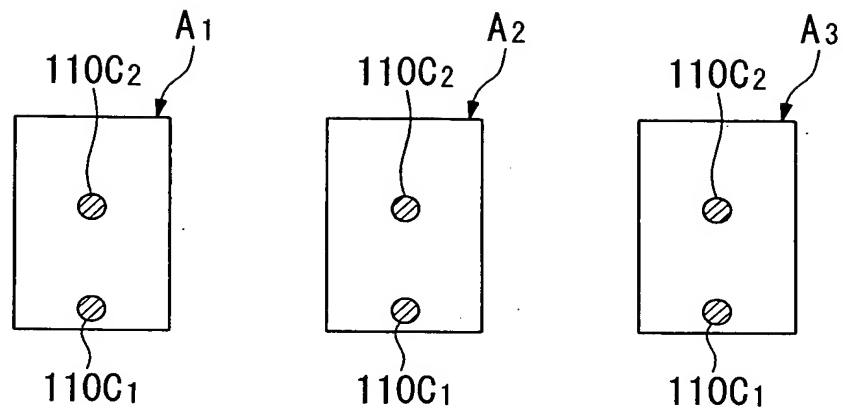


Fig. 42B

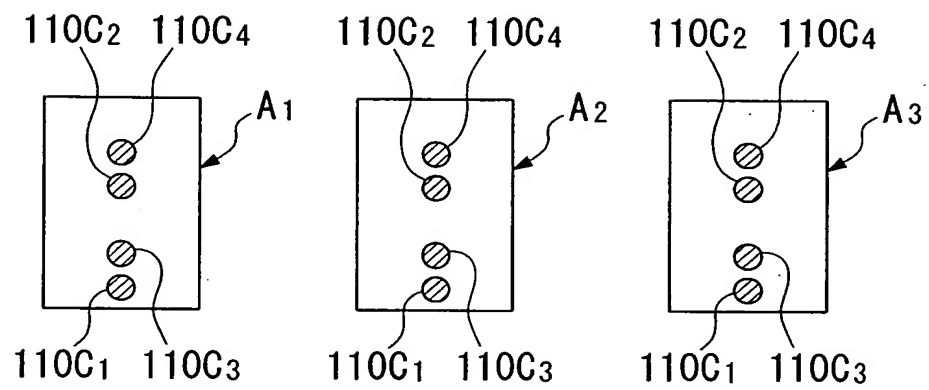


Fig. 42C

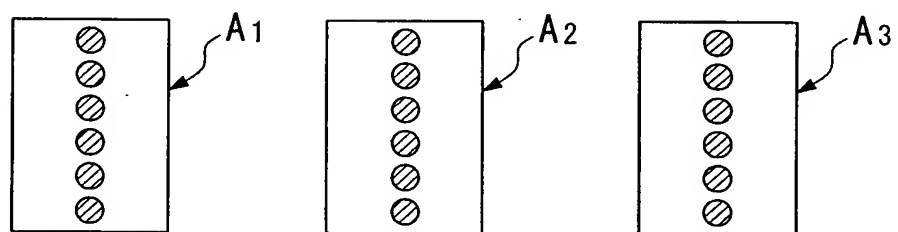


Fig. 43A

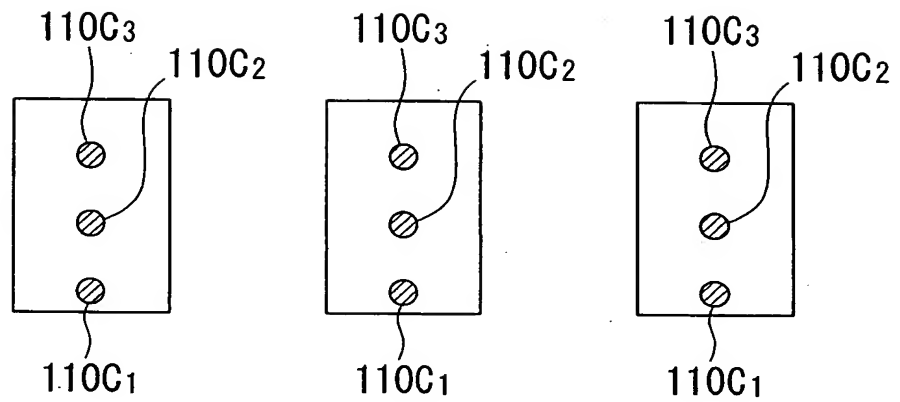


Fig. 43B

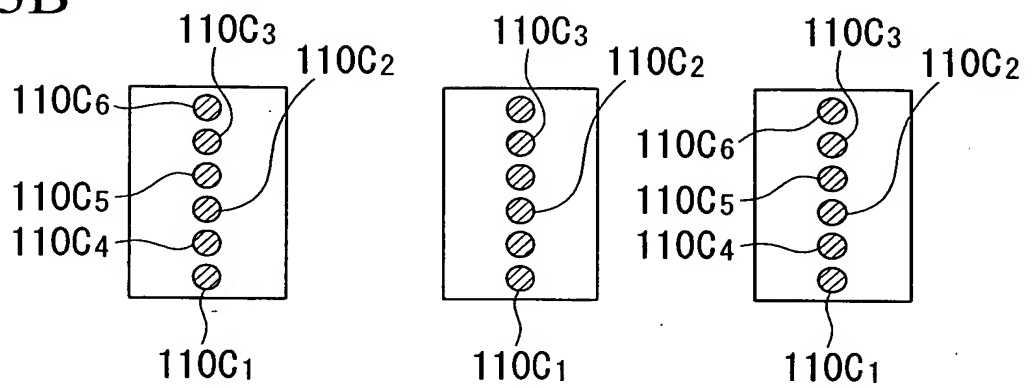


Fig. 43C

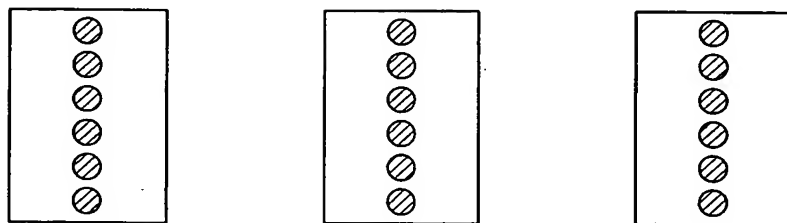


Fig. 44

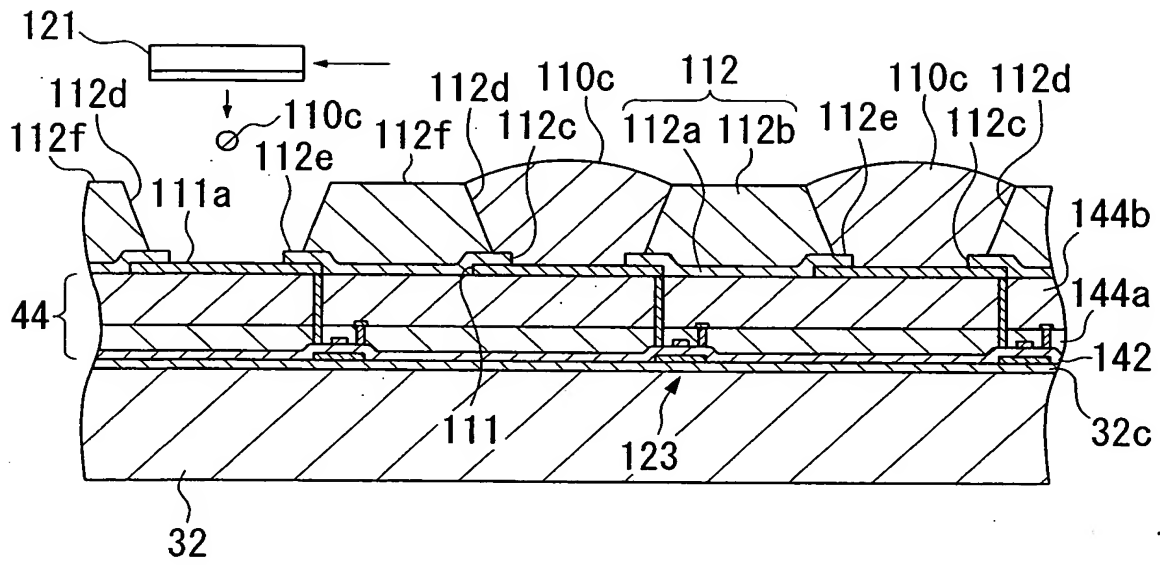


Fig. 45

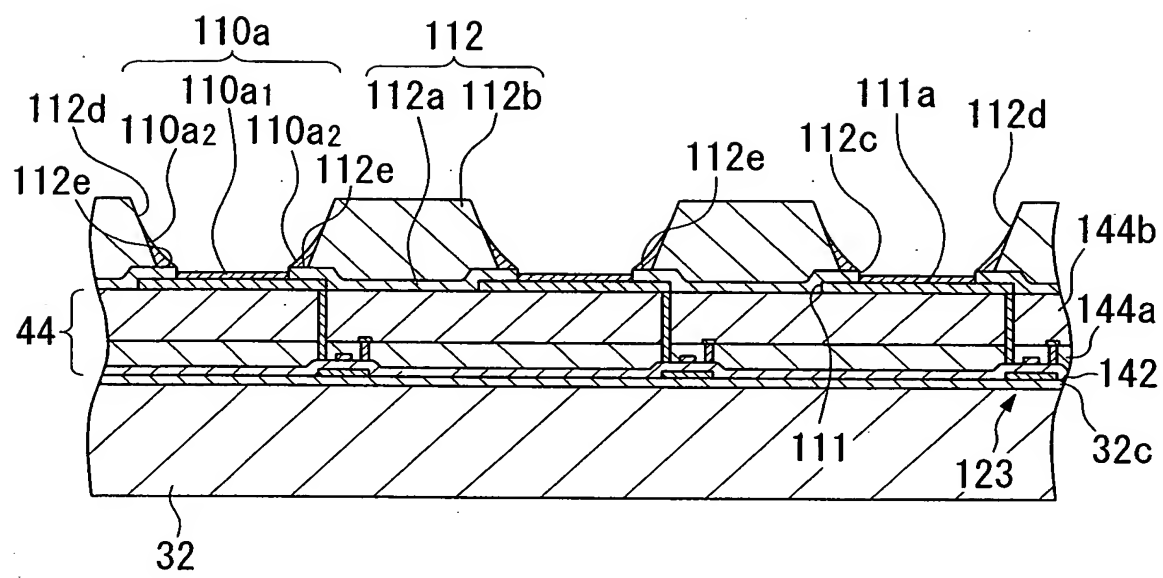




Fig. 46

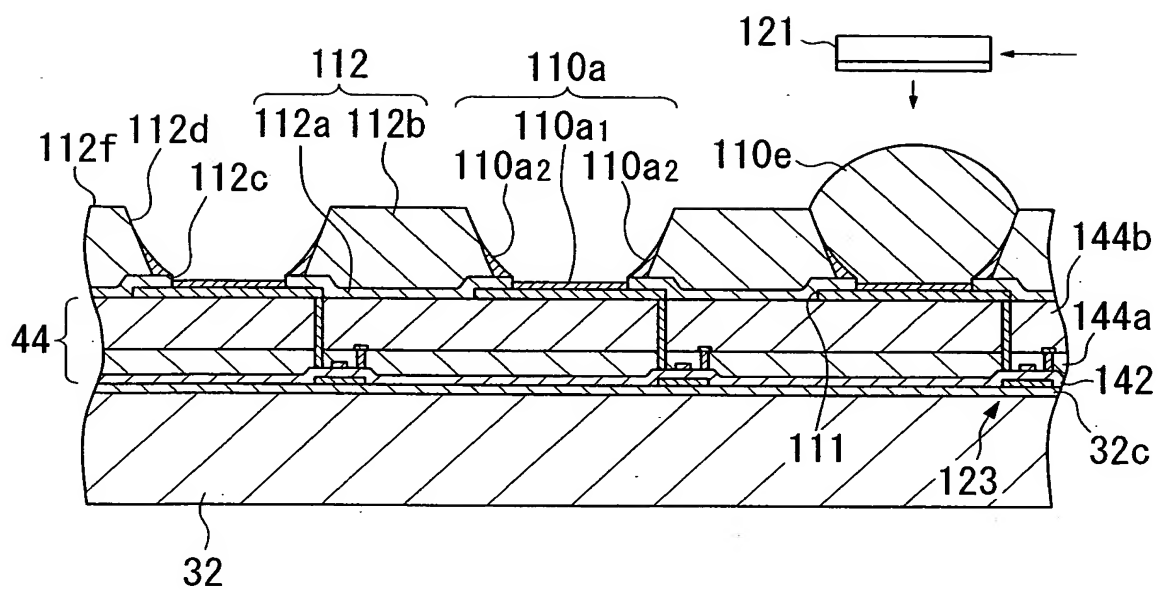


Fig. 47

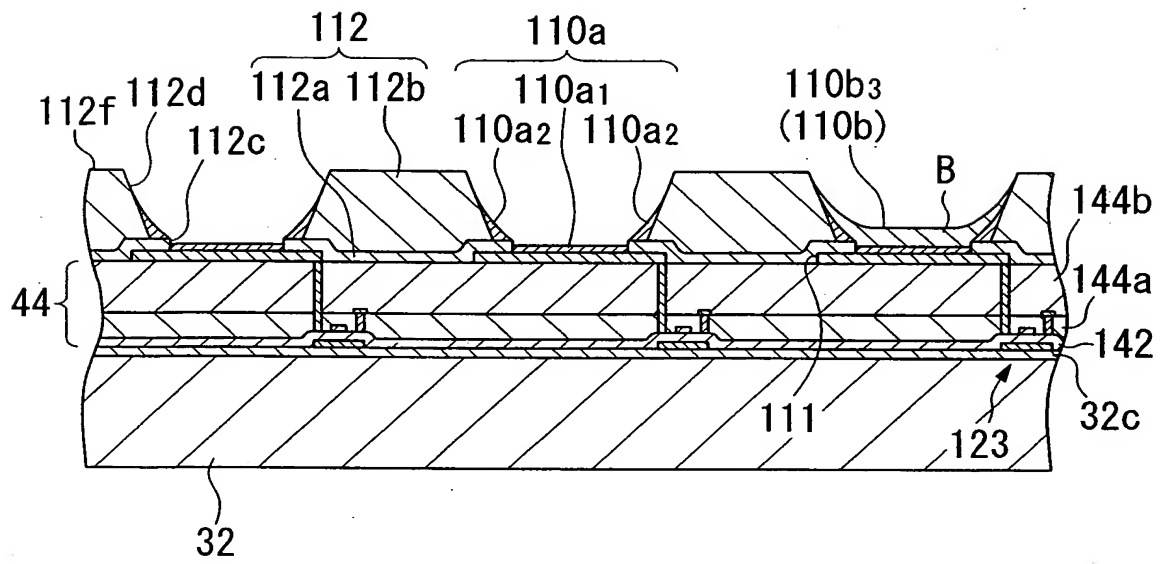


Fig. 48

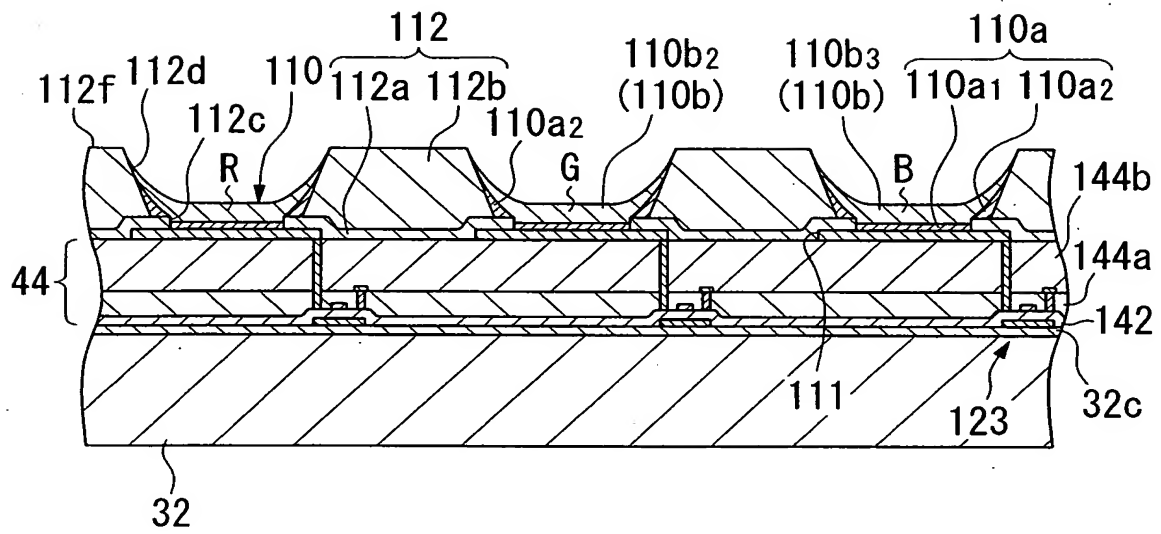




Fig. 50

